AD_____

Award Number: W81XWH-11-1-0635

TITLE: Treatment of Social Competence in Military Veterans, Service Members, and Civilians with Traumatic Brain Injury

PRINCIPAL INVESTIGATOR: Cynthia Harrison-Felix, PhD

CONTRACTING ORGANIZATION: Craig Hospital, Englewood, CO 80113

REPORT DATE: August 2012

TYPE OF REPORT: Annual Report

PREPARED FOR: U.S. Army Medical Research and Materiel Command

Fort Detrick, Maryland 21702-5012

REPORT DOCUMENTATION PAGE

Form Approved
OMB No. 0704-0188

1. REPORT DATE	2. REPORT TYPE	3. DATES COVERED
01-08-2012	Annual	1 Aug 2011 - 31 Jul 2012

4. TITLE AND SUBTITLE
Treatment of Social Competence in Military Veterans, Service Members, and Civilians with Traumatic Brain Injury.

5a. CONTRACT NUMBER

5b. GRANT NUMBER
W81XWH-11-1-0635

5c. PROGRAM ELEMENT NUMBER

6. AUTHOR(S)

Cynthia Harrison-Felix, PhD
Jennifer Coker, MPH
Clare Morey, MA, CCC-SLP
E-Mail: jcoker@craighospital.org; cmorey@craighospital.org; charrison-felix@craighospital.org

5d. PROJECT NUMBER

5e. TASK NUMBER

5f. WORK UNIT NUMBER

7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES)

Craig Hospital
Englewood, CO 80113

8. PERFORMING ORGANIZATION REPORT NUMBER

9. SPONSORING / MONITORING AGENCY NAME(S) AND ADDRESS(ES)
U.S. Army Medical Research and Materiel Command
Fort Detrick, Maryland 21702-5012

10. SPONSOR/MONITOR'S ACRONYM(S)

11. SPONSOR/MONITOR'S REPORT NUMBER(S)

12. DISTRIBUTION / AVAILABILITY STATEMENT
Approved for Public Release; Distribution Unlimited

13. SUPPLEMENTARY NOTES

14. ABSTRACT

Impairments in social competence are among the most prevalent sequelae after traumatic brain injury (TBI). Without successful social skills a person is often isolated, in conflict with others, and denied access to social and vocational opportunities. The aim of this study is to determine the effectiveness of a manualized group treatment program to improve and maintain social competence for individuals with TBI with identified social skill deficits. The Group Interactive Structured Treatment (GIST) - Social Competence program is a holistic, dual-disciplinary intervention targeting the pervasive interpersonal and communication problems that often interfere with participation at work, home, school and in the community after TBI.

During the first year of this project, the infrastructure for successful collaboration was established, with ongoing monitoring of the study. The study design, measures, and interventions were finalized, IRB approvals were received for all sites, the data dictionary and project protocols were prepared; training materials were developed and study training was completed; the data management system was designed and testing and revision is ongoing; program data management reports are in progress.

15. SUBJECT TERMS
Traumatic brain injury, social competence, social skills, intervention

16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT	18. NUMBER OF PAGES	19a. NAME OF RESPONSIBLE PERSON
a. REPORT	b. ABSTRACT	c. THIS PAGE			USAMRMC
U	U	U	UU	54	19b. TELEPHONE NUMBER *(include area code)*

TABLE OF CONTENTS **PAGE**

INTRODUCTION

Background: Impairments in social competence are among the most prevalent sequelae after traumatic brain injury (TBI). Without successful social skills a person is often isolated, in conflict with others, and denied access to social and vocational opportunities. The aim of this study is to determine the effectiveness of a manualized group treatment program to improve and maintain social competence for individuals with TBI with identified social skill deficits. The Group Interactive Structured Treatment (GIST) - Social Competence program is a holistic, dual-disciplinary intervention targeting the pervasive interpersonal and communication problems that often interfere with participation at work, home, school and in the community after TBI.

Aims and Hypotheses: Aim 1: Measure the effectiveness of the GIST intervention with multisite implementation. Hypothesis 1a: Those receiving the GIST will demonstrate significant improvement in social competence, compared to those receiving the alternative treatment, as measured by the Profile of Pragmatic Impairment in Communication (PPIC). Hypothesis 1b: Compared to the alternative intervention, those receiving the GIST will maintain improvement in social competence at 3 months post-intervention, as measured by the PPIC. Hypothesis 1c: Compared to the alternative intervention, those receiving the GIST will demonstrate improvement in additional aspects related to social competence at 3 months post-intervention, as measured by two subscales of the Behaviorally Referenced Rating System of Intermediate Social Skills-Revised, the LaTrobe Communication Questionnaire, the Goal Attainment Scale, the Brief Symptom Inventory-18, and the Post Traumatic Stress Disorder Check List – Civilian version. Hypothesis 1d: Compared to the alternative intervention, those receiving the GIST will demonstrate improvement at 3 months post intervention in quality of life, as measured by the Satisfaction with Life Scale. Aim 2: Identify the potent ingredients associated with the GIST. Hypothesis 2a: Compared to the alternative intervention, those receiving the GIST will demonstrate stronger group cohesion associated with improved social competence, as measured by the Group Cohesion Scale – Revised. Hypothesis 2b: Compared to the alternative intervention, those receiving the GIST will demonstrate stronger social self efficacy associated with improved social competence, as measured by the Scale of Perceived Self Efficacy.

Study Design: This study uses a two-arm, multi-centered randomized controlled clinical trial design to compare the GIST treatment to an alternative treatment, in which participants are presented information from the GIST treatment program without the group process. A total of 192 military, veteran and civilian participants with mild to moderate TBI will be enrolled by six centers. Measures will be collected at baseline, post-treatment, and 3 months post-treatment. Videotapes of participants will be evaluated for social competence by blinded independent raters, and progress on individualized social skills goals will be assessed. Replicable training of group leaders will include a 2 ½ day in-person workshop followed by feedback during a pilot of the intervention and alternative intervention. The fidelity of the intervention will be assessed by independent raters using a standardized instrument to ensure that the intervention is implemented consistently. Results of this study will be disseminated to relevant stakeholders via presentations and publications. By the end of this study, the field will have definitive evidence about the effectiveness of a group social competence intervention for people with TBI.

Military Benefit: The proposed study has a high degree of relevance for returning OIF/OEF soldiers and veterans post-TBI due to the prevalence of social reintegration difficulties in this population. The GIST intervention has the potential to assist our soldiers and veterans in returning to full participation in their families, communities and productive activity.

BODY

Objective 1: Establish infrastructure for successful collaboration:

T1: Conduct Steering Committee teleconferences & local Project Site Team meetings:

ONGOING. Monthly teleconferences with all sites; bi-monthly meetings locally all documented by meeting minutes.

T2: Schedule & conduct Steering Committee via web conference:

WEB CONFERENCE not needed at this point as all coordination is occurring via monthly teleconferences.

T3: Schedule study training in Colorado:

COMPLETE. Study training took place June 27-28, 2012.

T4: Monitor budget and study progress monthly:

ONGOING. Sub-awardees have not been able to invoice for all budgeted funds in the first year due to delays in IRB approvals, staff hiring, etc. However, all sites have expressed they want to carryover remaining funds for use in year 2 as the pilot study will be completed and the clinical trial will begin which will require additional staff resources.

Objective II: Finalize study design, project materials, & obtain IRB approval

T1: Finalize study design, measures & interventions:

COMPLETE (see Appendix for study measures)

T2: Submit IRB/regulatory applications per site:

COMPLETE

T3: Prepare data dictionary/syllabus & project protocols:

COMPLETE

T4: Finalize training agenda and materials:

COMPLETE

T5: Obtain IRB/regulatory approvals at each site:

All sites have local IRB approval. All sites have received DoD HRPO approval.

Objective III: Design, Test, and Implement Data Management System

T1: Design Data Management System:

COMPLETE

T2: Program data dictionary & data entry for all study measures & tracking:

COMPLETE

T3: Test/revise data management system:

ONGOING

T4: Program data management reports:

WORK IN PROGRESS

OBJECTIVE IV: Train collaborating researchers & group therapists

T1: Train study researchers & therapists (May-July 2012)

COMPLETE with the exception of one group therapist at the Palo Alto, CA site that was on maternity leave and could not be trained with the rest of the group therapists. The intervention trainers will be providing on-site training on September 6, 2012 with this therapist and her group partner therapist who did attend the training.

T2: Evaluate Training (May-July 2012)

COMPLETE

T3: Training as needed for dropout of group therapists; evaluate training (Aug 2012-Oct 2013)
Not applicable at this time as no therapists have dropped out.

KEY RESEARCH ACCOMPLISHMENTS

No key research accomplishments to report as of yet with the exception of completing Objectives and Tasks planned for the first year on time.

REPORTABLE OUTCOMES

No reportable outcomes as of yet.

CONCLUSIONS

No conclusions to report as of yet.

REFERENCES

None

APPENDICES

Final study assessments
Training agendas

List of Data Collection Tools

1. Demographics Information
2. Profile of Pragmatic Impairment in Communication
3. Behaviorally Referenced
4. Medical Symptom Validity Test
5. WAIS-III Coding
6. WAIS-III Symbol Search
7. Trail Making Test A & B
8. Rey Auditory Verbal Learning Test
9. La Trobe Communication Questionnaire (self)
10. La Trobe Communication Questionnaire (
11. Brief Symptom Inventory Checklist
12. PTSD Symptom Checklist
13. Perceived Social Self Efficacy
14. Satisfaction with Life Scale
15. Group Cohesion Scale
16. Goal Attainment Scale

TBI Social Competence Collaborative Study
DEMOGRAPHIC FORM

Participant ID #: _____ Enrollment Date: __ __ / __ __ / __ __ __ __

Do you have a family member or close friend who would be willing/able to complete some study assessments? *(Circle One)*

1-No **2-Yes** *If Yes, please answer the questions below*

First Name: _____

This person is my: *(Circle One)*

1-Mother / Father **2-Wife / Husband** **3-Brother / Sister**

4-Son / Daughter **5-Roommate / Friend** **6-Girlfriend / Boyfriend**

1. Date of Injury: __ __ / __ __ / __ __ __ __

2. Cause of injury

1-Motor Vehicle **2-Motorcycle** **3-Bicycle**

4-ATV/ATC/Go-Cart **5-Other Vehicular** **6-Gun Shot**

7-Assault with a Blunt Instrument **8-Other Violence** **9-Water Sports**

10-Field/Track Sports **11-Gymnastics Activities** **12-Winter Sports**

13-Air Sports **14-Other Sports** **15-Fall**

16-Hit by Falling/Flying Object **17-Pedestrian** **18-Blast**

19-Unclassified **20-Unknown**

3. What is your date of birth? __ __ / __ __ / __ __ __ __

4. What is your race? *(Circle One)*

1-White **2-Black** **3-Asian/Pacific Islander**

4-Hispanic Origin **5-Native American**

5. What is your current marital status? *(Circle One)*

1-Never Married **2-Married / Common Law** **3-Divorced**

4-Separated **5-Widowed**

a. Since your injury has your marital status changed? *(Circle One)*

1-**No Change** **2-Separated** **3-Divorced**

4-Married **5-Widowed**

6-Divorce & Married (In Either Order)

7-Widowed & Married (In Either Order)

8-Divorced, Married & Widowed (In Any Order)

6. Who are you currently living with? (*Circle One)*

1-No One (Live Alone) **2-Wife / Husband** **3-Mother / Father**

4-Brother / Sister **5-Child Younger than 21** **6-Child 21 or Older**

7-Other Relatives **8-Roommate / Friend** **9-Girlfriend / Boyfriend**

10-Other Patients **11-Other Residents**

12-Personal Care Attendant

7. Where do you live now? *(Circle One)*

1-Private Home / Apartment **2-Nursing Home** **3-Adult Home**

4-Hotel / Motel **5-Homeless** **6-Acute Hospital**

7-Rehab Hospital **8-Other Hospital** **9-Sub-Acute Care**

8. Gender *(Circle One)*

1-**Male** 2-**Female**

9. How many years of education have you completed?

(If participant has not graduated from high school, circle the number of years spent in school. If the participant has at least a high school diploma, circle the highest degree earned – or worked toward). *(Circle One)*

1-**1 Year Or Less**	2-**2 Years**	3-**3 Years**
4-**4 Years**	5-**5 Years**	6-**6 Years**
7-**7 Years**	8-**8 Years**	9-**9 Years**
10-**10 Years**	11-**11 / 12 Years (No Diploma)**	12-**High School (Diploma)**
13-**Work Toward Associate's**	14-**Associate's Degree**	15-**Work toward Bachelor's**
16-**Bachelor's Degree**	17-**Work Toward Master's**	18-**Master's Degree**
19-**Worked Toward Doctoral**		20-**Doctoral Degree**

10. Did you earn a GED instead of graduating from high school? *(Circle One)*

1-**No** 2-**Yes** 3-**N/A (received high school diploma or attended college)**

11. What is your current employment status? *If Employed, please answer the question below*

1-**Employed**	2-**Unemployed**	3-**Retired**
4-**On Leave From Work**	5-**Special Employment / Sheltered Workshop**	

a. In a typical **week**, how many hours do you spend working for money, whether in a job or self-employed?

1-**None**	2-**1-4 hours**	3-**5-9 hours**
4-**10-19 hours**	5-**20-34 hours**	6-**35 or more hours**
7-**Don't know/not sure**	8-**Refused**	

12. Are you currently attending school?

1-No **2-Yes** *If Yes, please answer questions a and b below*

a. Are you a full or part time student?

1-Full Time Student **2-Part Time Student**

b. In a typical **week**, how many hours do you spend working toward a degree or in an accredited technical training program, including hours in class and studying?

1-None **2-1-4 hours** **3-5-9 hours**

4-10-19 hours **5-20-34 hours** **6-35 or more hours**

7-Don't know/not sure **8-Refused**

13. In a typical **month** how many times do you do volunteer work?

1-None **2-1-4 times** **3-5-9 times**

4-10-19 times **5-20-34 times** **6-35 or more times**

7-Don't know/not sure **8-Refused**

14. Have you ever served in the military?

1-No **2-Yes** *If Yes, please answer questions a through c below*

a. How many years of active duty did you serve?

Years: ☐

b. Were you ever deployed in a combat zone?

1-No **2-Yes**

c. Under which branch of the military did you serve?

1-Army **2-Navy** **3-Marines**

4-Coast Guard **5-Air Force**

Office Use Only		LC	GP	QN	QL	IR	ER	CE	SS	SM	AE
	SBI count										
	SBI sum										
	FSS										

Profile of Pragmatic Impairment in Communication (PPIC)[1]

R. J. Linscott, R. G. Knight, & H. P. D. Godfrey. (2003). Department of Psychology, University of Otago, Dunedin, New Zealand.

Your name: _____ Date: _____

Your relationship to the person being assessed: ☐ not applicable ☐ professional ☐ family / friend

Name of person being assessed: _____ Age: _____ Sex: ☐ male ☐ female

Subscale 1: Literal Content

Ideal: Irrespective of context, social appropriateness, relevance, or any other contextually derived factors, an utterance should be logical and understandable.

Bear in mind what is actually said—words, grammar, syntax, and semantics—disregarding inferences that can be drawn from the context of the conversation which may add additional meaning to the utterances.

	not applicable	not at all	occasionally	often	nearly always / always
01 the flow of utterances is disrupted and broken (dysfluency)	☐	☐	☐	☐	☐
02 sentences are fragmented	☐	☐	☐	☐	☐
03 uses simple sentence structures	☐	☐	☐	☐	☐
04 uses meaningless words	☐	☐	☐	☐	☐
05 describes simple things with many words (circumlocutions)	☐	☐	☐	☐	☐
06 says odd or bizarre things	☐	☐	☐	☐	☐
07 says sounds or words unintentionally (paraphasic utterances)	☐	☐	☐	☐	☐
08 has difficulty naming objects (anomic)	☐	☐	☐	☐	☐
09 uses peculiar catch-phrases	☐	☐	☐	☐	☐
10 leaves out parts of sentences	☐	☐	☐	☐	☐

1.fs Overall, and considering the relative importance of any deficits listed in the items on the left, how would you rate the subject's ability to use logical, understandable, and coherent language?

☐ normal
☐ very mildly impaired
☐ mildly impaired
☐ moderately impaired
☐ severely impaired
☐ very severely impaired

Subscale 2: General Participation

Ideal: Participants contribute to a dialogue in an effort to meet an (implicit or explicit) conversational goal that has some shared value.

Bearing in mind the subject's contribution as a whole, consider the subject's coordination of ideas, attempts to meet the other's needs, and their general participation.

	not applicable	not at all	occasionally	often	nearly always / always
11 ideas are well-knit and cohesively organised	○	○	○	○	○
12 appears disinterested in the other	☐	☐	☐	☐	☐
13 responds to social initiatives	○	○	○	○	○
14 asks questions	○	○	○	○	○
15 is boring to listen to	☐	☐	☐	☐	☐
16 gives unfriendly responses to other's social initiatives	☐	☐	☐	☐	☐
17 appears unskilful	☐	☐	☐	☐	☐
18 contributes spontaneously to conversation	○	○	○	○	○
19 skilled at taking turns	○	○	○	○	○
20 contributes equally to the conversation	○	○	○	○	○
21 is dominating	☐	☐	☐	☐	☐
22 difficult to converse with	☐	☐	☐	☐	☐

2.fs Overall, and considering the relative importance of any deficits listed in the items on the left, how would you rate the subject's ability to participate in social interactions in a manner which is organised and sensitive to the other's interests?

- ☐ normal
- ☐ very mildly impaired
- ☐ mildly impaired
- ☐ moderately impaired
- ☐ severely impaired
- ☐ very severely impaired

Subscale 3: Quantity

Ideal: Information provided matches listener's needs.

Bear in mind the amount of information that the subject provides and how that level of information matches (or does not match) the other's needs.

	not applicable	not at all	occasionally	often	nearly always / always
23 talks over other's head	☐	☐	☐	☐	☐
24 provides excessive detail	☐	☐	☐	☐	☐
25 perceives misinterpretation of meaning	○	○	○	○	○
26 responsive to requests for clarification	○	○	○	○	○
27 provides insufficient detail	☐	☐	☐	☐	☐
28 uses jargon inappropriately	☐	☐	☐	☐	☐
29 patronises other	☐	☐	☐	☐	☐

3.fs Overall, and considering the relative importance of any deficits listed in the items on the left, how would you rate the subject's ability to provide an appropriate amount of information given the other's needs or understanding?

- ☐ normal
- ☐ very mildly impaired
- ☐ mildly impaired
- ☐ moderately impaired
- ☐ severely impaired
- ☐ very severely impaired

Subscale 4: Quality

Ideal: Subject's contributions to conversation are true to the subject's knowledge and beliefs.

Bear in mind how honest and factual the subject's contribution appears, noting that this is not a character rating, but a subjective evaluation of how the subject appears in the situation(s) being considered.

	not applicable	not at all	occasionally	often	nearly always / always
30 makes up stories (confabulates)	☐	☐	☐	☐	☐
31 exaggerates	☐	☐	☐	☐	☐
32 is consistent	○	○	○	○	○
33 appears to be telling the truth	○	○	○	○	○
34 boasts	☐	☐	☐	☐	☐

4.fs Overall, and considering the relative importance of any deficits listed in the items on the left, how would you rate the subject's ability to contribute information in a manner that appears honest or factual?

☐ normal
☐ very mildly impaired
☐ mildly impaired
☐ moderately impaired
☐ severely impaired
☐ very severely impaired

Subscale 5: Internal Relation

Ideal: The relationship between successive ideas within a turn should be clear and cohesive in nature; ideas should be immediately relevant and related.

Bearing in mind the subject's turns in isolation from the other's turns, consider the structuring and the relatedness of the ideas the subject presents.

	not applicable	not at all	occasionally	often	nearly always / always
35 over-uses elaboration	☐	☐	☐	☐	☐
36 there is good continuation between ideas	○	○	○	○	○
37 over-emphasises unimportant ideas	☐	☐	☐	☐	☐
38 repeats information	☐	☐	☐	☐	☐
39 ideas appear jumbled or poorly coordinated	☐	☐	☐	☐	☐
40 elaborates spontaneously	○	○	○	○	○
41 ideas are illogically connected (thought disordered)	☐	☐	☐	☐	☐

5.fs Overall, and considering the relative importance of any deficits listed in the items on the left, how would you rate the subject's ability to contribute ideas in an organised and related manner?

☐ normal
☐ very mildly impaired
☐ mildly impaired
☐ moderately impaired
☐ severely impaired
☐ very severely impaired

Subscale 6: External Relation

Ideal: There is a good relation between the ideas presented in a turn and the ideas presented by the other's immediately preceding turn.

Bear in mind the relation and relevance between the subject's turns and the other's turns.

[Note: Items related to question use assume that questions were a feature of the individual's conversation—see Item 14 in Subscale 2. If this was not so, mark as *not applicable*.]

	not applicable	not at all	occasionally	often	nearly always / always
42 gives listener responses (e.g., "...right ...yeah ...mmm ...is that so? ...aha ...")	○	○	○	○	○
43 mimics other's utterances (echolalia)	☐	☐	☐	☐	☐
44 gives appropriate types of listener responses	○	○	○	○	○
45 asks inappropriate questions (see footnote)	☐	☐	☐	☐	☐
46 uses questions well (see footnote)	○	○	○	○	○
47 integrates own ideas with other's ideas	○	○	○	○	○

6.fs Overall, and considering the relative importance of any deficits listed in the items on the left, how would you rate the subject's ability to relate their own comments to the other's preceding contributions?

☐ normal
☐ very mildly impaired
☐ mildly impaired
☐ moderately impaired
☐ severely impaired
☐ very severely impaired

Subscale 7: Clarity of Expression

Ideal: Ideas are presented clearly.

Bear in mind the conciseness with which ideas are presented, disregarding dysfluency or articulation problems that the subject might exhibit.

	not applicable	not at all	occasionally	often	nearly always / always
48 is ambiguous or vague	☐	☐	☐	☐	☐
49 uses lucid, clear, or succinct expression	○	○	○	○	○
50 is obscure	☐	☐	☐	☐	☐

7.fs Overall, and considering the relative importance of any deficits listed in the items on the left, how would you rate the subject's ability to express ideas clearly and concisely?

☐ normal
☐ very mildly impaired
☐ mildly impaired
☐ moderately impaired
☐ severely impaired
☐ very severely impaired

Subscale 8: Social Style

Ideal: Contributions to a conversation should be appropriate given context and background of the conversation, and the subject's relationship with the other.

Bear in mind the context of the conversation and how the subject's style matches the context, irrespective of the topic of the conversation.

	not applicable	not at all	occasionally	often	nearly always / always
51 is over-polite or over-courteous	☐	☐	☐	☐	☐
52 gives excessive attention	☐	☐	☐	☐	☐
53 is overly respectful or flattering toward the other	☐	☐	☐	☐	☐
54 is too informal	☐	☐	☐	☐	☐
55 dominates control over conversational direction	☐	☐	☐	☐	☐
56 is overly formal or ceremonial	☐	☐	☐	☐	☐
57 helps direct the conversation	○	○	○	○	○
58 is impolite or discourteous	☐	☐	☐	☐	☐
59 gives inappropriate types of attention	☐	☐	☐	☐	☐
60 pays insufficient attention	☐	☐	☐	☐	☐
61 shows disrespect or irreverence toward other	☐	☐	☐	☐	☐

8.fs Overall, and considering the relative importance of any deficits listed in the items on the left, how would you rate the subject's ability to use an appropriate social style?

☐ normal
☐ very mildly impaired
☐ mildly impaired
☐ moderately impaired
☐ severely impaired
☐ very severely impaired

Subscale 9: Subject Matter

Ideal: The topic content should be appropriate given the moral, cultural, and social background and values of the context and the other.

Bear in mind what the subject has actually said, and the appropriateness of what was said, especially in terms of offensiveness or deviance, given the social and cultural context.

	not applicable	not at all	occasionally	often	nearly always / always
62 is overly intimate	☐	☐	☐	☐	☐
63 inappropriate (sexual, religious, political) content	☐	☐	☐	☐	☐
64 talks about self too much (egocentric)	☐	☐	☐	☐	☐
65 uses profanities or swears	☐	☐	☐	☐	☐
66 is abusive or insulting to self or other	☐	☐	☐	☐	☐

9.fs Overall, and considering the relative importance of any deficits listed in the items on the left, how would you rate the subject's ability to adhere to socially, culturally, or morally appropriate subject matter in their conversations?

☐ normal
☐ very mildly impaired
☐ mildly impaired
☐ moderately impaired
☐ severely impaired
☐ very severely impaired

Subscale 10: Aesthetics

Ideal: A certain level of quantitative and qualitative aesthetic variation is used to add meaning, emphasis, or variety to the contribution made by the participants.

Bear in mind the subject's interaction as whole; where method of observation precludes ascertainment of the particular behaviour, rate as not applicable.

	not applicable	not at all	occasionally	often	nearly always / always
67 has a long response latency	☐	☐	☐	☐	☐
68 voice is too loud	☐	☐	☐	☐	☐
69 speaks too quickly	☐	☐	☐	☐	☐
70 speaks in monotone voice	☐	☐	☐	☐	☐
71 is restless and fidgety	☐	☐	☐	☐	☐
72 interrupts	☐	☐	☐	☐	☐
73 performs inappropriate grooming behaviours during conversation	☐	☐	☐	☐	☐
74 uses humour inappropriately	☐	☐	☐	☐	☐
75 speaks too slowly	☐	☐	☐	☐	☐
76 uses affective expression appropriately	○	○	○	○	○
77 speaks in an excessively high or low voice	☐	☐	☐	☐	☐
78 scratches and itches self	☐	☐	☐	☐	☐
79 speaks too softly	☐	☐	☐	☐	☐
80 speech contains long or many pauses	☐	☐	☐	☐	☐
81 articulates words clearly	○	○	○	○	○
82 uses unusual or excessive gesturing	☐	☐	☐	☐	☐
83 uses word-play inappropriately	☐	☐	☐	☐	☐
84 uses normal phoneme stress	○	○	○	○	○

10.fs Overall, and considering the relative importance of any deficits listed in the items on the left, how would you rate the subject's ability to colour their contribution to social interaction with aesthetic features?

☐ normal
☐ very mildly impaired
☐ mildly impaired
☐ moderately impaired
☐ severely impaired
☐ very severely impaired

Office Use Only		LC	GP	QN	QL	IR	ER	CE	SS	SM	AE
	SBI count										
	SBI sum										
	FSS										

Scoring Instructions: The specific behaviour items (items numbered 01 to 84) are rating on a 4-point scale, *not at all*, *occasionally*, *often*, or *almost always or always*, and are to be scored as 0 to 3 if in a negative frame of reference (indicated by tick boxes), respectively, or 3 to 0 for items worded in a positive frame of reference (indicated by tick circles). A *not noted* response option is included for the specific behaviour items; such responses are not scored. The feature summary scales (items numbered 1.fs to 10.fs) are rated on a 6-point scale, *normal, very mildly impaired, mildly impaired, moderately impaired, severely impaired,* or *very severely impaired,* and scored 0 to 5 respectively. Scores on the feature summary scales and specific behaviour items are processed separately. The following summary scores are used:

(i) **SBI count**: the number of specific behaviour items (within each subscale) which receive a score of greater than or equal to 1;
(ii) **SBI sum**: the sum of the scores on the specific behaviour items (within each subscale); and
(iii) **FSS**: the score of the rating given on the feature summary scale.

From these scores, profiles of impairment may be constructed. Examples are provided in Linscott et al. (1996). Ratings on feature summary scales may be interpreted as representing an aggregate of the ratings on specific behaviour items without having to assume a linear relationship between scores on specific behaviour items and the feature summary scale.

Notes on the Use of the PPIC[2]

Training, Administration, & Scoring

1. The purpose of the PPIC is the detection of pragmatic impairment in communication. The PPIC is based on an extension of Grice's (1975, 1978) analysis of implicature. The scale is divided into 10 subscales: literal content (LC), general participation (GP), quantity (QN), quality (QL), internal relation (IR), external relation (ER), clarity of expression (CE), social style (SS), subject matter (SM), and aesthetics (AE). Each subscale is prefaced by a description of the aspect of communication behaviour that is the target of the subscale. A number of specific behaviour items then follow; a total of 84 specific behaviour items are divided unequally among the 10 subscales. Each subscale has one feature summary scale following after the specific behaviour items. Extended definitions for each specific behaviour item are contained below.

2. Training. Raters should be aware of the definitions of the specific behaviour items (see below) and understand the differences between the aspects of communication behaviour assessed by the subscales.

3. The individual whose communication is being assessed is referred to as the SUBJECT; the individual with whom the subject communicates in the dialogue(s) is referred to as the OTHER.

4. The context of assessment of communication impairment should be a dyadic interaction. Assessment should ideally be based on multiple interactions occurring at different times, provided that the level of structure in the interactions is homogeneous.

5. Scoring: The specific behaviour items are rating on a 4-point scale, not at all, occasionally, often, or almost always or always, and are to be scored as 0 to 3, respectively, or 3 to 0 for items worded in a positive frame of reference (marked with °). A not noted response option is included for the specific behaviour items; such responses are not scored. The feature summary scales are rated on a 6-point scale, normal, very mildly impaired, mildly impaired, moderately impaired, severely impaired, or very severely impaired, and scored 0 to 5 respectively. Scores on the feature summary scales and specific behaviour items processed separately. The following summary scores are used:

(i) SBI count: the number of specific behaviour items (within each subscale) which receive a score of greater than or equal to 1;
(ii) SBI sum: the sum of the scores on the specific behaviour items (within each subscale); and
(iii) FSS: the score of the rating given on the feature summary scale.

From these scores, profiles of impairment may be constructed. Examples are provided in Linscott et al. (in press). Ratings on feature summary scales may be interpreted as representing an aggregate of the ratings on specific behaviour items without having to assume a linear relationship between scores on specific behaviour items and the feature summary scale.

Definitions

Subscale 1: Literal Content

01 the flow of utterances is disrupted and broken (dysfluency) . . . dysfluency refers to the disruption of the flow of speech due to hesitations, frequent mid-sentence breaks or pauses, or false starting and re-starting at the beginning of sentences.

02 sentences are fragmented . . . fragmentation refers to the ordering of sentence parts. When fragmentation is present there is a lack of intrasentential (intra-sentence) cohesion; a disorganisation of sentence parts occurs. In the extreme, a sentence may seem like a random ordering of words (or word salad).

03 uses simple sentence structures . . . the structure of the sentences is basic, as if spoken by a young child. For example, 'I went to the shop. I saw some tomatoes there' etc.

04 uses meaningless words . . . (neologisms) refers to the use of words which the subject has made up; the words have no or an unknown meaning.

05 describes simple things with many words (circumlocutions) . . . refers to the use of long-winded phrases where one or a few words commonly suffice. For example, is attempting to say 'toothbrush,' the subject says 'that long plastic thing with spikes on one end and which you move back and forth in your mouth.'

06 says odd or bizarre things . . . refers to the saying of sentences that have unusual, strange, outlandish, peculiar, or ridiculous meaning.

07 says sounds or words unintentionally (paraphasic utterances) . . . paraphasic utterances refer to the production of unintentional words, syllables, or phrases during speech due to mispronunciation or inappropriate substitution.

08 has difficulty naming objects (anomic) . . . anomia refers to the inability to name objects or use an objects name in speech.

09 uses peculiar catch-phrases . . . refers to the repetitious use of peculiar phrases (or unusual word ordering) which has no effect on meaning.

10 leaves out parts of sentences . . . sentences lack essential components in a way that effects the meaning or prevents meaning from being conveyed. For example, sentences are started half-way through, ends of sentences are cut off, or sentence components are missing (verbs, nouns, subject etc.).

Subscale 2: General Participation

11 ideas are well-knit and cohesively organised . . . refers to the organisation and coordination of ideas in the subject's contribution. When well organised and coordinated, the contribution appears cohesive and possesses suprasentential (supra-sentence) cohesion.

12 appears disinterested in the other . . . refers to the situation where, while it may be that Item 13, "responds to social initiatives," applies, and there is an increase in social interaction, the subject appears to lack interest in the interaction or in the other.

13 responds to social initiatives . . . when the other initiates a conversation, the subject responds in a manner that increases the amount of social interaction, and does not withdraw from, or ignore, the other's social initiatives. If the latter is the case, there is a decline in the amount of social interaction from the point at which the other attempts to start the conversation.

14 asks questions . . . refers to explicit requests for information where the request is not a listener response (see items 42 and 44 in Subscale 6) or a brief request for clarification of a point which the other has already made. For examples, 'What do you do for a living?' is a question as here defined, ' . . . oh? . . . ' is a listener response, and 'I'm sorry, I didn't catch that, could you explain that again?' is a brief request for clarification.

15 is boring to listen to . . . refers to the subject's apparent failure to engage the other's interest or the inability to maintain a favourable level of the other's interest.

16 gives unfriendly responses to other's social initiatives . . . refers to the situation where, while it may be that 2.03 responds to social initiatives applies, and there is a subsequent increase in social interaction, the subject's responses are unfriendly, non-compliant, hostile, or non-facilitative.

17 appears unskilful . . . refers to the level of competence which the subject converses with in social interactions.

18 contributes spontaneously to conversation . . . refers to the flooring of unsolicited information, unsolicited initiating of a new turn or subject matter, or in drawing attention to the other (making the other the point of discussion).

19 skilled at taking turns . . . refers to the level of skill that the subject displays at beginning a new turn (taking the floor) or at giving the floor over to the other.

20 contributes equally to the conversation . . . refers to the degree to which the subject participates in a complementary manner, or provides contributions which facilitate further conversation and contributions from the other. Impairment in this area might be evident by a failure on the subject's behalf to give any more than simple 'yes' or 'no' responses.

21 is dominating . . . refers to the degree to which the subject appears to control, or attempt to control, the social interaction.

22 difficult to converse with . . . refers to the effort required when talking with (listening to, understanding) the subject-difficult implying that greater effort is required compared to normal social interactions.

Subscale 3: Quantity

23 talks over other's head . . . the subject uses language and terminology that is beyond the other's capacity to comprehend, the other's age, or the other's apparent (lack of) experience/familiarity with the topic.

24 provides excessive detail . . . the amount of detail was beyond that which would normally be of interest to a listener.

25 perceives misinterpretation of meaning . . . the subject detects cues indicating the other has failed to understand what the subject said.

26 responsive to requests for clarification . . . requests for clarification, either in the form of inflected listener responses (e.g., ' . . . oh? . . . ') or explicit requests (e.g., 'I'm sorry, run that by me again.') are followed by suitable repetition or clarification of the information requested.

27 provides insufficient detail . . . the subject provides too little information or detail, making the contribution appear incomplete or unbalanced.

28 uses jargon inappropriately . . . uses a style of speech (or set of terms) that is typical of a group or profession, inappropriately given the others capacity to understand.

29 patronises other . . . the subject uses language and terminology that is over-simplistic given the other's capacity to comprehend, the other's age, or the other's apparent experience/familiarity with the topic.

Subscale 4: Quality

30 makes up stories (confabulates) . . . refers to the reporting of fictitious experiences-lack of authenticity being ascertained from the context or conversation.

31 exaggerates . . . distorts aspects of information beyond reasonable truth.

32 is consistent . . . information given at one point in the conversation is not contradictory to, or in discord with, any other information presented in the conversation or obvious from the context.

33 appears to be telling the truth . . . the subject appears to be reporting information that the subject believes is true or factual.

34 boasts . . . reports information in a manner which appears self-glorifying, or excessively prideful, or arrogant.

Subscale 5: Internal Relation

35 over-uses elaboration . . . the amount of information the subject contributes beyond what is contextually sufficient is excessive.

36 there is good continuation between ideas . . . there is a smooth flow between successive ideas in a turn; flow between the ideas in a turn is not abrupt.

37 over-emphasises unimportant ideas . . . a disproportionately large emphasis is placed on ideas that seem to be less important, giving the appearance that all ideas are equally important, or making it difficult to ascertain what the central ideas are.

38 repeats information . . . an idea or piece of information is expressed more than once.

39 ideas appear jumbled or poorly coordinated . . . considering the turn as a whole, the ideas presented were misordered or disorganised.

40 elaborates spontaneously . . . following other's prompts, the subject provides requested information (the contextually sufficient response) plus additional related information not explicitly requested (e.g., other: 'So, do you have any kids?' subject: 'Yeah [contextually sufficient response], they are all at high school now [spontaneous elaboration].')

41 ideas are illogically connected (thought disordered) . . . the relationship between successive ideas presented in a turn is illogical, or unusual, or weak.

Subscale 6: External Relation

42 gives listener responses (e.g., " . . . right . . . yeah . . . mmm . . . is that so? . . . aha . . . ") . . . when the other is talking the subject provides these or similar backchannels.

43 mimics other's utterances (echolalia) . . . refers to the parroting of the other's utterances.

44 gives appropriate types of listener responses . . . listener responses are suitably discreet and subtle, yet reinforcing.

45 asks inappropriate questions . . . information is requested by the subject in an inappropriate manner, or the information requested is inappropriate given the context of the conversation or the subject's relation to the other.

46 uses questions well . . . the timing of questions and the type of questions appear to facilitate the subject's understanding of the other's contribution, or facilitate increased positive social interaction.

47 integrates own ideas with other's ideas . . . the ideas that the subject contributes have some connection/relation to the ideas in the other's preceding turn.

Subscale 7: Clarity of Expression

48 is ambiguous or vague . . . there is a failure to be clear and concise when expressing ideas.

49 uses lucid, clear, or succinct expression . . . the subject presents ideas clearly (perspicuously) and with brevity.

50 is obscure . . . the subject leaves important information hidden or unexplained.

Subscale 8: Social Style

51 is over-polite or over courteous . . . the subject is overly courteous or cultured or refined.

52 gives excessive attention . . . the amount and degree of attention given by the subject is excessive.

53 is overly respectful or flattering toward the other . . . the subject esteems or honours the other, or avoids offending or interrupting the other to an extent that is inappropriate, or continually belittles own ideas in preference for the others ideas.

54 is too informal . . . the subject's style of communication lacks suitable propriety, or conformity to etiquette, or precision of custom.

55 dominates control over conversational direction . . . the subject talks about that which they wish to, whether or not that is what the other wants to, or is, talking about, and the subject generally gives little or no regard to the other's conversational interest.

56 is overly formal or ceremonial . . . the subject is overly ceremonial, or regulated, or there is inflexible adherence to etiquette associated with more formal contexts.

57 helps direct the conversation . . . the subject provided some input into the topic being discussed, or the progression and digressions in the conversation.

58 is impolite or discourteous . . . the subject is discourteous and communicates in an unrefined manner.

59 gives inappropriate types of attention . . . attention given by the subject is not directed at socially relevant/appropriate aspects of the interaction (e.g., staring at particular anatomical features).

60 pays insufficient attention . . . the amount and degree of attention given by the subject is minimal or insufficient (e.g., the subject continually looks around the room, or stares out the window, never looking at the other when the other is talking).

61 shows disrespect or irreverence toward other . . . the subject is insolent or impertinent toward the other, or belittles the other's ideas.

Subscale 9: Subject Matter

62 is overly intimate . . . there is excessive disclosure of frankly personal or private information by the subject.

63 inappropriate (sexual, religious, political) content . . . the topic or information the subject discusses deviates from that which is appropriate.

64 talks about self too much (egocentric) . . . the subject talks only, or too frequently, about himself or herself.

65 uses profanities or swears . . . the subject talks irreverently or with disregard, or uses expletives.

66 is abusive or insulting to self or other . . . the subject verbally derides, or is derogatory, or verbally maltreats himself or herself or the other.

Subscale 10: Aesthetics

67 has a long response latency . . . the beginning of subject's turns are characterised by long silences (with or without fillers) before responding to the other.

68 voice is too loud . . . volume of voice is inappropriately high.

69 speaks too quickly . . . speed of utterances is inappropriately fast.

70 speaks in monotone voice . . . the subject's tone of voice fails to rise and fall, lacking intonation, inflection or tonal emphasis.

71 is restless and fidgety . . . [self-explanatory].

72 interrupts . . . the offering of information or attempt to gain the floor while the other is speaking.

73 performs inappropriate grooming behaviours during conversation . . . [self-explanatory].

74 uses humour inappropriately . . . jokes or other purposefully humorous comments were inappropriate.

75 speaks too slowly . . . speed of utterances is inappropriately slow.

76 uses affective expression appropriately . . . the subject expresses emotion or mood appropriately, and the degree of affective expression is appropriate.

77 speaks in an excessively high or low voice . . . the subject's vocal base frequency (pitch of voice) was inappropriately high or low.

78 scratches and itches self . . . [self-explanatory].

79 speaks too softly . . . volume of voice is inappropriately low.

80 speech contains long or many pauses . . . relative to the amount of time that the subject holds the floor, the frequency or duration of mid-utterance silences (with or without fillers) was too great.

81 articulates words clearly . . . pronunciation is not slurred, or stuttered, or intensively clipped.

82 uses unusual or excessive gesturing . . . the type or amount of hand/limb/body movements used to add meaning is inappropriate.

83 uses word-play inappropriately . . . inappropriate use is made of language features such as puns, irony, metaphor, litotes (meiosis; understatement), onomatopoeia, euphemism, personification etc.

84 uses normal phoneme stress . . . normal word stress patterns are adhered to (e.g., ábdomen vs. abdómen, húman vs. humán, ópposite vs. oppósite).

Scale Construction, Reliability, and Validity

Scale construction and the results of a preliminary evaluation of the psychometric qualities of the PPIC are reported in Linscott et al. (1996) and Godfrey et al. (2000). The sample used in Linscott et al. (1996) consisted of videotapes of a small group of individuals who had sustained traumatic brain injuries. Godfrey et al. (2000) is a brief report on communication in children with traumatic brain injuries. This report includes estimates of inter-rater reliability (intra-class correlation coefficients) as well as concurrent validity (correlations with duration of post-traumatic amnesia and discrimination of control and clinical groups). Two papers report on studies of pragmatic language impairment, assessed with the PPIC, in Alzheimer's disease (Hays et al., 2004) and schizophrenia (Linscott, 2005).

Note

The PPIC was formerly titled the Profile of Functional Impairment in Communication [PFIC]. The use of *pragmatic* instead of *functional* in the title portrays a more accurate reflection of the construct the scale is intended to measure and is more consistent with terminology used in the field (e.g., Irwin et al., 2002; Manochiopinig et al, 1992).

References

Godfrey, H. P. D., Unsworth, R., Linscott, R. J., & Sander, M. R. (2000). Psychometric evaluation of the Profile of Functional Impairment in Communication with traumatically brain injured children. *New Zealand Journal of Psychology*, *29*, 20-23.

Grice, H. P. (1975). Logic and conversation. In P. Cole & J. L. Morgan (Eds.), *Syntax and semantics: Vol. 3. Speech acts*. (pp. 41-58). New York: Academic Press.

Grice, H. P. (1978). Further notes on logic and conversation. In P. Cole (Ed.), *Syntax and semantics: Vol. 9. Pragmatics.* (pp. 113-127). New York: Academic Press.

Hays, S.-J., Niven, B. E., Godfrey, H. P. D., & Linscott, R. J. (2004). Clinical assessment of pragmatic language impairment: A generalisability study of older people with Alzheimer's disease. *Aphasiology*, *18*, 693-714.

Irwin, W. H., Wertz, R. T., & Avent, J. R. (2002). Relationships among language impairment, functional communication, and pragmatic performance in aphasia. *Aphasiology*, *16*, 823-835.

Linscott, R. J. (2005). Thought disorder, pragmatic language impairment, and generalized cognitive decline in schizophrenia. *Schizophrenia Research*, *75*, 225-232.

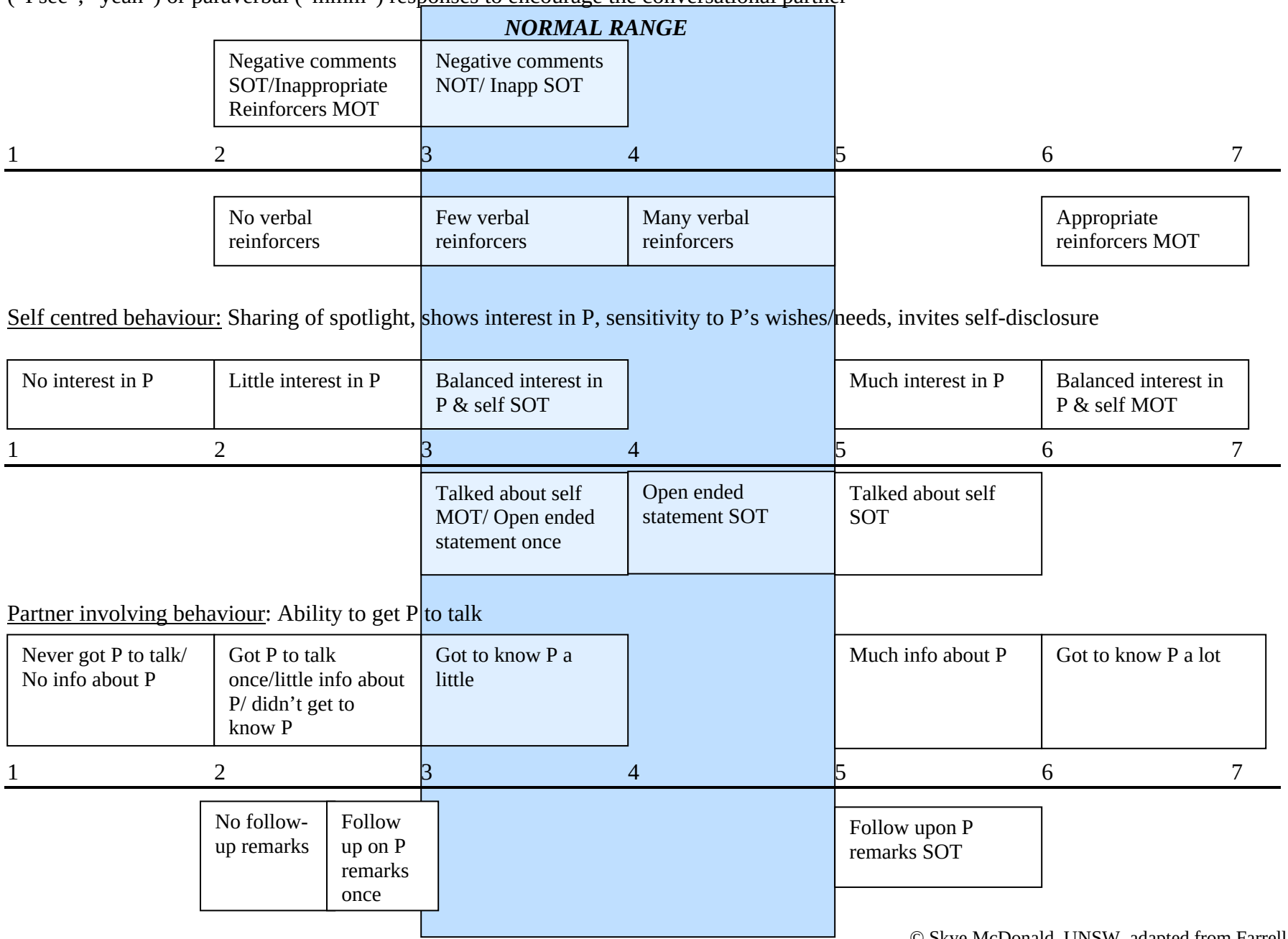
Linscott, R. J., Knight, R. G., & Godfrey, H. P. D. (1996). The Profile of Functional Impairment in Communication (PFIC): A measure of communication impairment for clinical use. *Brain Injury*, *6*, 397-412.

Manochiopinig, S., Sheard, C., & Reed, V. A. (1992). Pragmatic assessment in adult aphasia: A clinical review. *Aphasiology*, *6*, 519-533.

Last updated: 25 August, 2005

BRISS-R: PARTNER DIRECTED BEHAVIOUR Facilitates involvement of P in conversation

Use of Reinforcers: I.e. Displays (un) rewarding behaviour towards P, pays attention to P, shows interest in conversation. Use of verbal ("I see", "yeah") or paraverbal ("mmm") responses to encourage the conversational partner

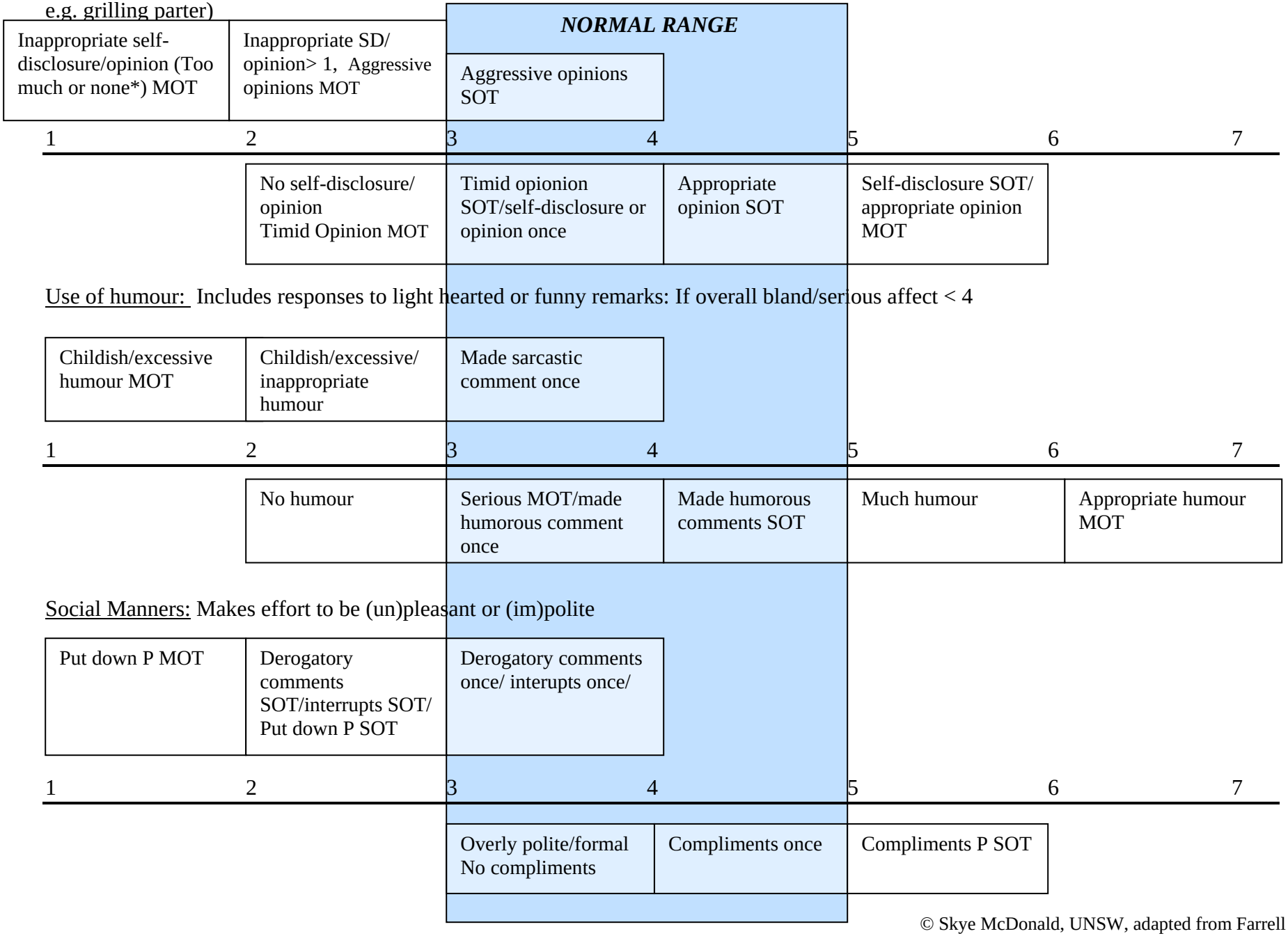


Self centred behaviour: Sharing of spotlight, shows interest in P, sensitivity to P's wishes/needs, invites self-disclosure

Partner involving behaviour: Ability to get P to talk

BRISS_R: PERSONAL CONVERSATIONAL STYLE- General communicative pattern. Rate 4 if mostly silent

Self disclosure: extent of self disclosure weighted heavily by appropriateness, closed vs open (* no self disclosure when is appropriate e.g. grilling parter)



Use of humour: Includes responses to light hearted or funny remarks: If overall bland/serious affect < 4

Social Manners: Makes effort to be (un)pleasant or (im)polite

Medical Symptom Validity Test

The MSVT for Windows was first displayed in public at the NAN meeting, Tampa, Fl., October 2005, after extensive validation in Canada, the USA, Britain, Germany & Brazil in English, German, Portuguese & French studies. The MSVT is now available from Green's Publishing.

The MSVT consists of a 94-page test manual and a CD with MSVT Windows program for patient testing, scoring and reporting of results. More than just a short form of the WMT, the MSVT is extremely cost effective and fast as a verbal memory screen with built-in effort measures.

Whereas the WMT has 20 word pairs, the MSVT has 10 pairs, cutting the test in half. The WMT has 6 subtests and a 30 minute delay between IR and DR subtests but the MSVT contains only 4 subtests and a 10 minute delay. Hence, the MSVT takes much less time than the WMT. Administration and scoring are automated.

The patient works on the MSVT for roughly 5 minutes. Your time administering the test is even less than that because it is computerized. The MSVT closely approximates the WMT in sensitivity. It has even higher specificity because it has been shown that MSVT subtests are objectively easier than WMT subtests in several groups (e.g. early and advanced dementia).

In a large Brazilian study (Courtney), the test was 99% accurate in differentiating between good effort versus simulated memory impairment. Of the simulators, 68 out of 70 cases failed the MSVT and all of them had an implausible profile. None of the simulators had a profile which would be consistent with dementia.

Two papers reporting completely independent research by Howe et al (2007, 2008) emphasize the importance of examining not only pass or fail on easy subtests but analyzing the profile of scores.

Whereas none of the simulators in the Brazilian study produced a "dementia profile", 95% of the dementia cases studied by Howe et al either passed or they produced a dementia profile (i.e. 97% sensitivity to poor effort and 95% specificity in dementia).

Howe, L. L. S., Anderson, A. M., Kaufman, D. A. S., Sachs, B. C., & Loring, D. W. (2007). Characterization of the Medical Symptom Validity Test in evaluation of clinically referred memory disorders clinic patients. Archives of Clinical Neuropsychology, 22 (6), 753-761

Howe, L.L.S. and Loring, D.W. (2008, in press) Classification Accuracy and Predictive Ability of The Medical Symptom Validity Test's Dementia Profile and General Memory Impairment Profile. The Clinical Neuropsychologist.

Non-French speaking children, when tested with the MSVT in French, scored the same as adults or children who are fluent in French (Gervais). Now, how does that happen?

The MSVT also has the Stealth option. The Stealth MSVT looks similar to the standard MSVT but the subtests have very different psychometric properties, the purpose being to deter coaching and render it ineffective.

Comparing MSVT & TOMM given to 292 adult outpatients with compensation incentives

	Pass MSVT	Fail MSVT
Pass TOMM	211	44
Fail TOMM	9	28

MSVT pass and fail rates were compared in two groups; those who had passed both WMT & TOMM (n=96) versus those who had failed both WMT and TOMM (n=17) in testing of outpatients involved in compensation claims by Dr. Gervais. Using only the simple pass-fail

distinction based on IR, DR & CNS scores, the MSVT was found to have 88% sensitivity; 91% specificity; 90% PPP and 89% NPP (assuming 50% base rate).

The MSVT and the MCI Windows programs may both be administered in English, French, Spanish, Dutch, German or Portuguese. The WMT Windows (Green, 2003) is in 10 languages (plus several more in the oral format). The nonverbal MSVT may be administered in any language. It is important to note that the primary purpose for the MSVT (& WMT) is to determine whether effort is sufficient to produce reliable and valid test scores on neuropsychological tests.

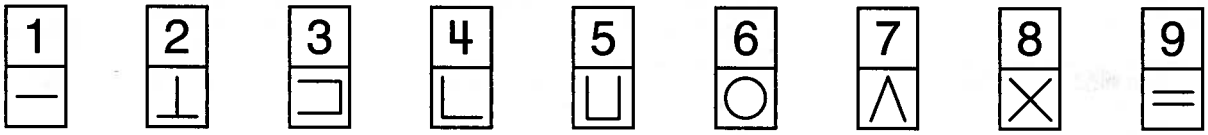
The nonverbal NV-MSVT is the latest addition to this series of tests, which measure both effort and memory. It may be used with people of any language because the patient sees no words at all on the screen. However, it incorporates several new principles not previously seen in any effort test.

Scores on CVLT SD Free Recall by pass/fail MSVT or TOMM

	N	Mean CVLT Free Recall	Std. Dev.	Mean CVLT Recog. Hits	Std. Dev.
Pass TOMM & MSVT	132	10.8	3.3	15	1.6
Fail only TOMM	5	8.8	2.5	13	1.9
Fail only MSVT	30	8.6	2.9	13	2.5
Fail both	14	7.1	2.8	13	2.8
		P<0.001		P<0.001	

The MSVT literally takes 5 minutes of the patient's time on task but the above table, based on patients tested by Dr. R. Gervais, Psychologist, shows that 15% of cases fail MSVT but pass TOMM. The above table shows that those who failed MSVT and passed TOMM (group 3) scored at a significantly lower level on the CVLT than those passing both. This is important.

Digit Symbol—Coding



Sample Items

2	1	3	7	2	4	8	2	1	3	2	1	4	2	3	5	2	3	1	4

5	6	3	1	4	1	5	4	2	1	6	3	5	7	2	8	5	4	6	3

7	2	8	1	9	5	8	4	7	3	6	2	5	1	9	2	8	3	7	4

6	5	9	4	8	3	7	2	6	1	5	4	6	3	7	9	2	8	1	7

9	4	6	8	5	9	7	1	8	5	2	9	4	8	6	3	7	9	8	6

2	7	3	6	5	1	9	8	4	5	7	3	1	4	8	7	9	1	4	5

7	1	8	2	9	3	6	7	2	8	5	2	3	1	4	8	4	2	7	6

WAIS®-III

WECHSLER ADULT INTELLIGENCE SCALE – THIRD EDITION

Name _____

Date _____

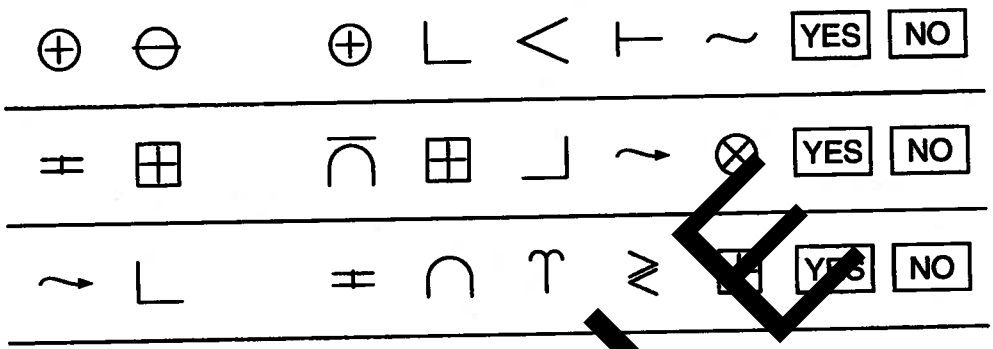
Examiner _____

Handedness (circle one): Left Right

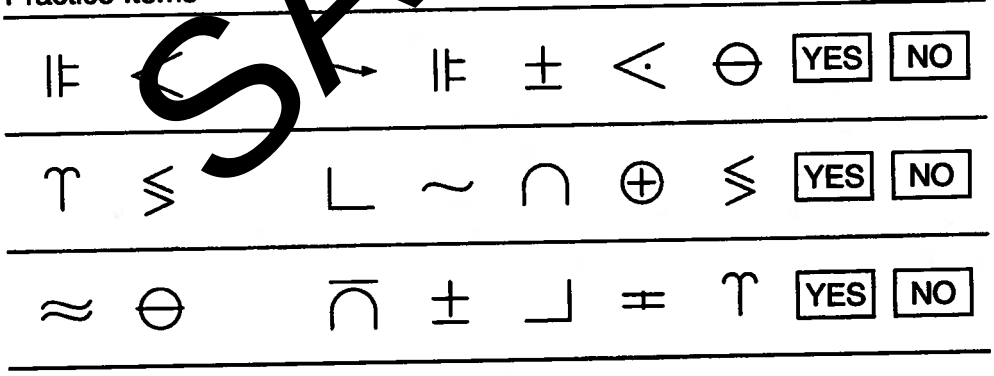
Response Booklet

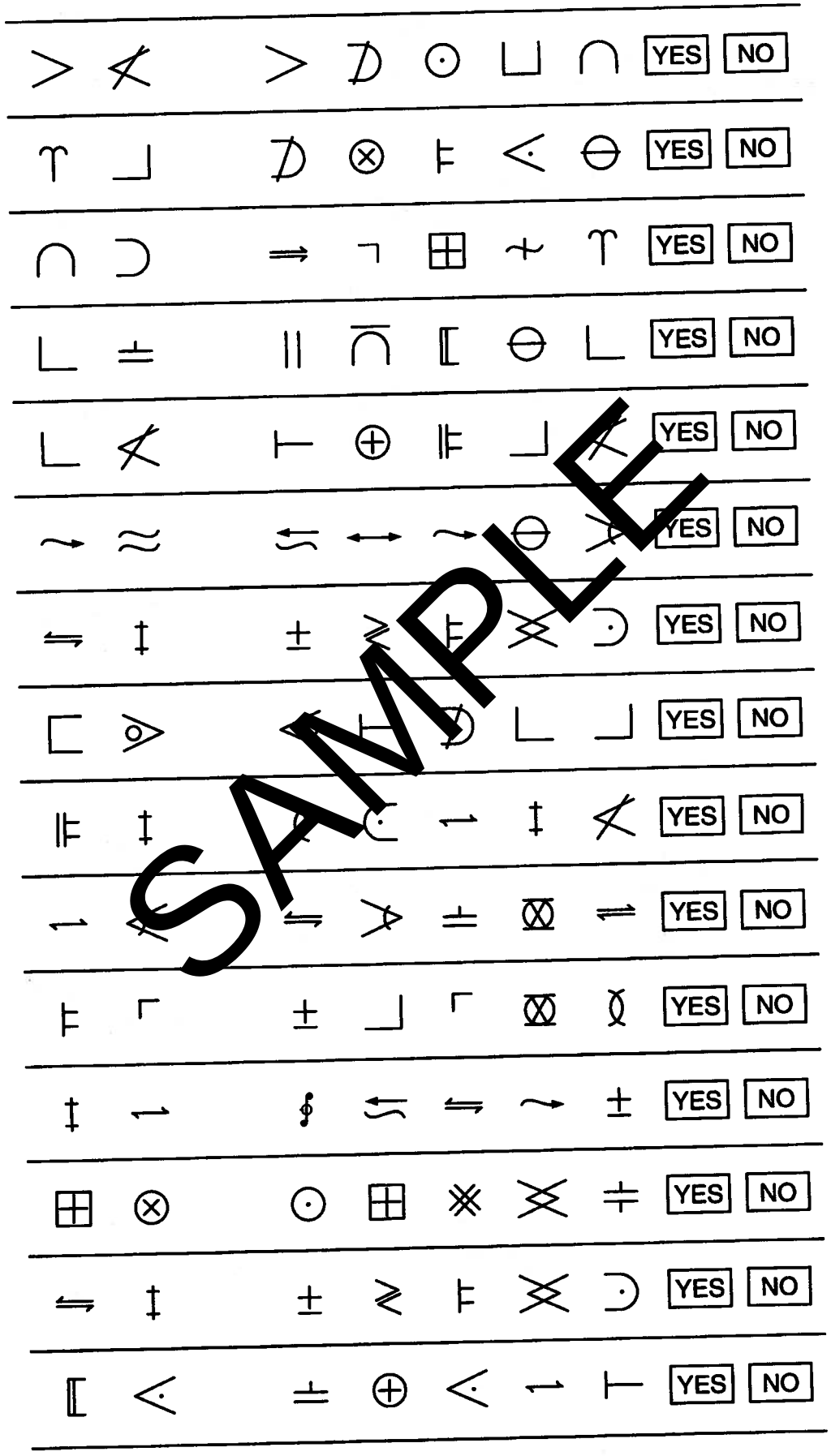
Symbol Search

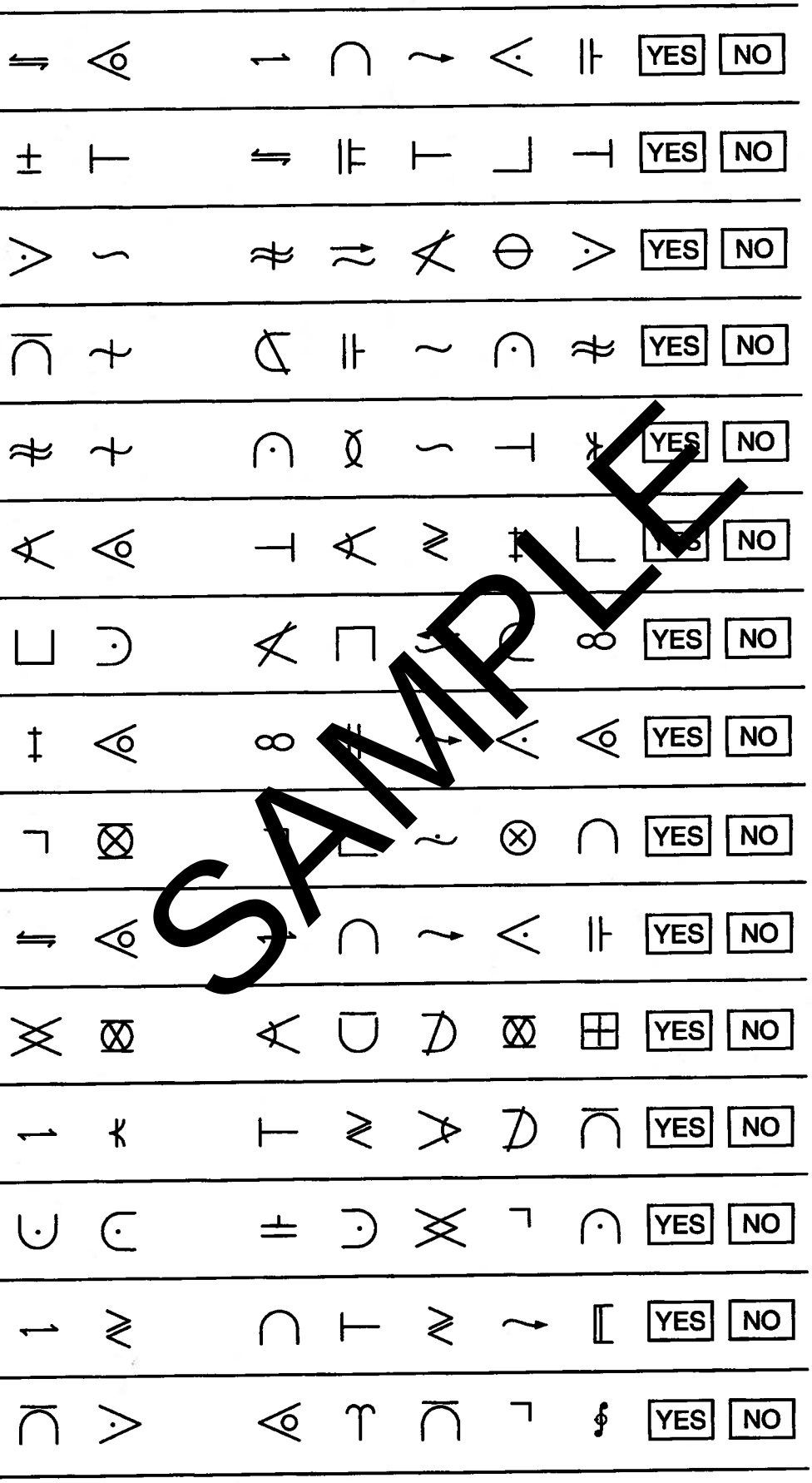
Sample Items

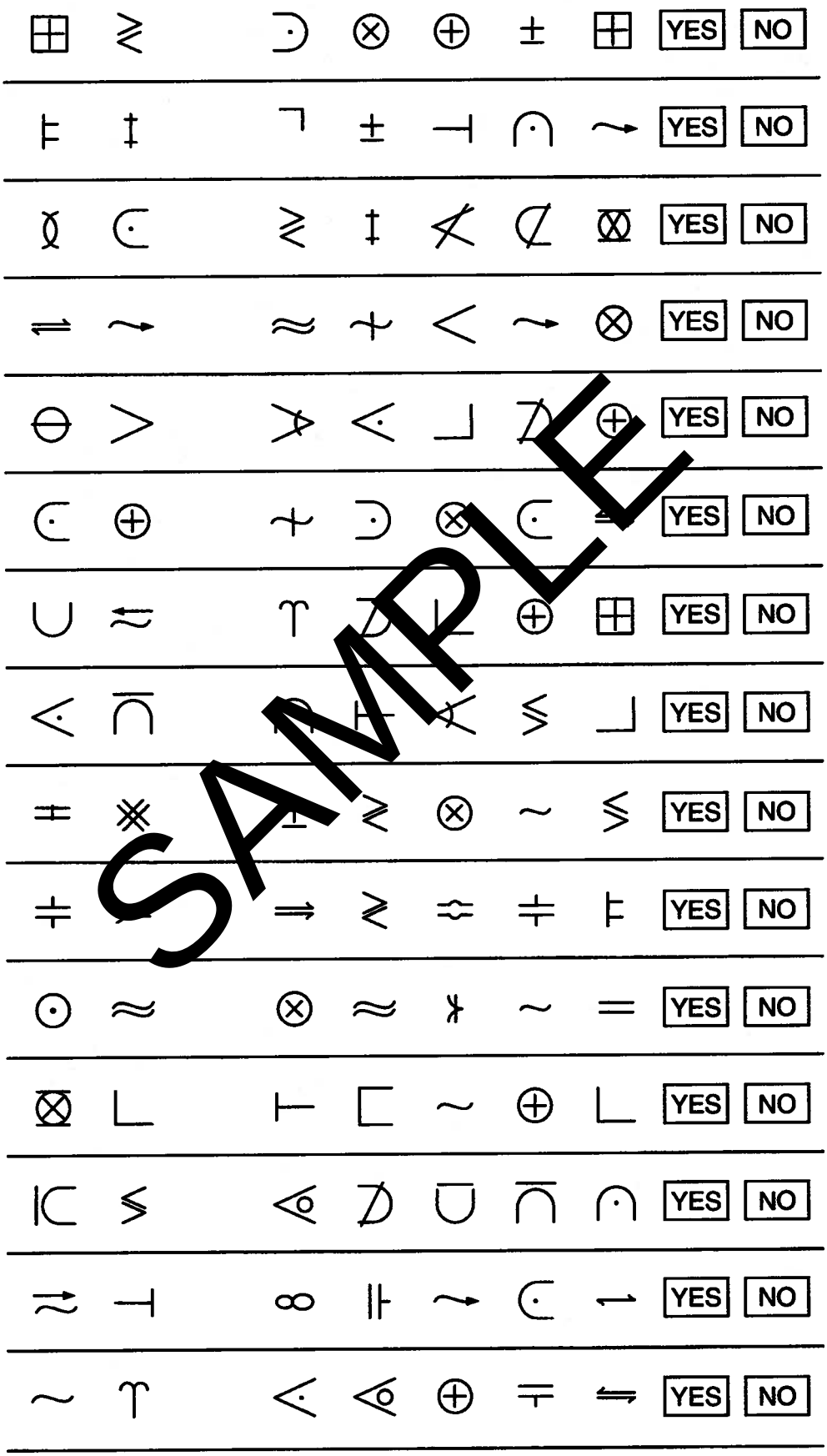


Practice Items




YES NO
YES NO
YES NO
YES NO
YES NO
YES NO
YES NO
YES NO
YES NO
YES NO
YES NO
YES NO
YES NO
YES NO
YES NO
YES NO
YES NO

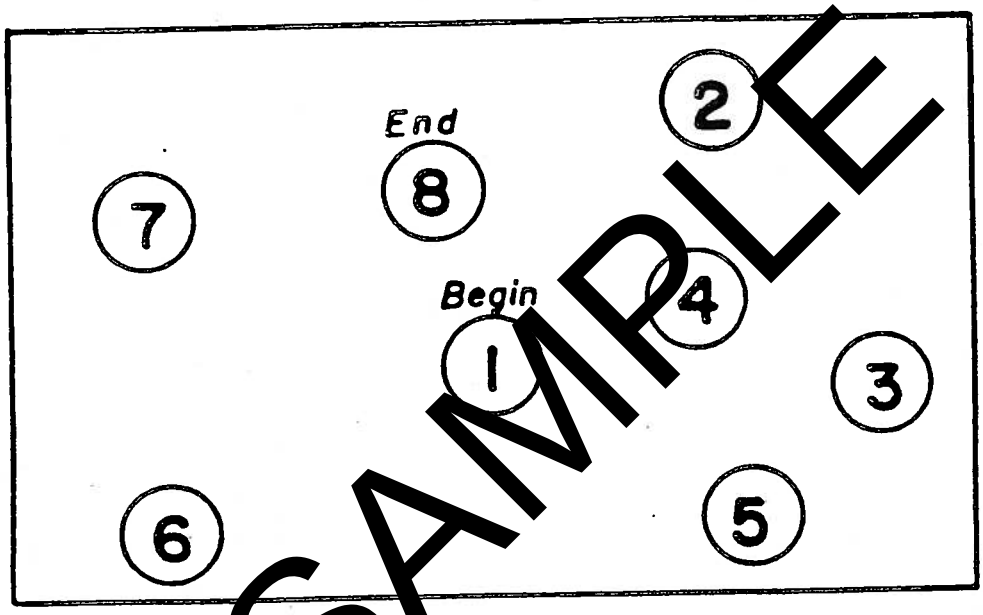

YES NO
YES NO
YES NO
YES NO
YES NO
YES NO
YES NO
YES NO
YES NO
YES NO
YES NO
YES NO
YES NO
YES NO
YES NO
YES NO
YES NO

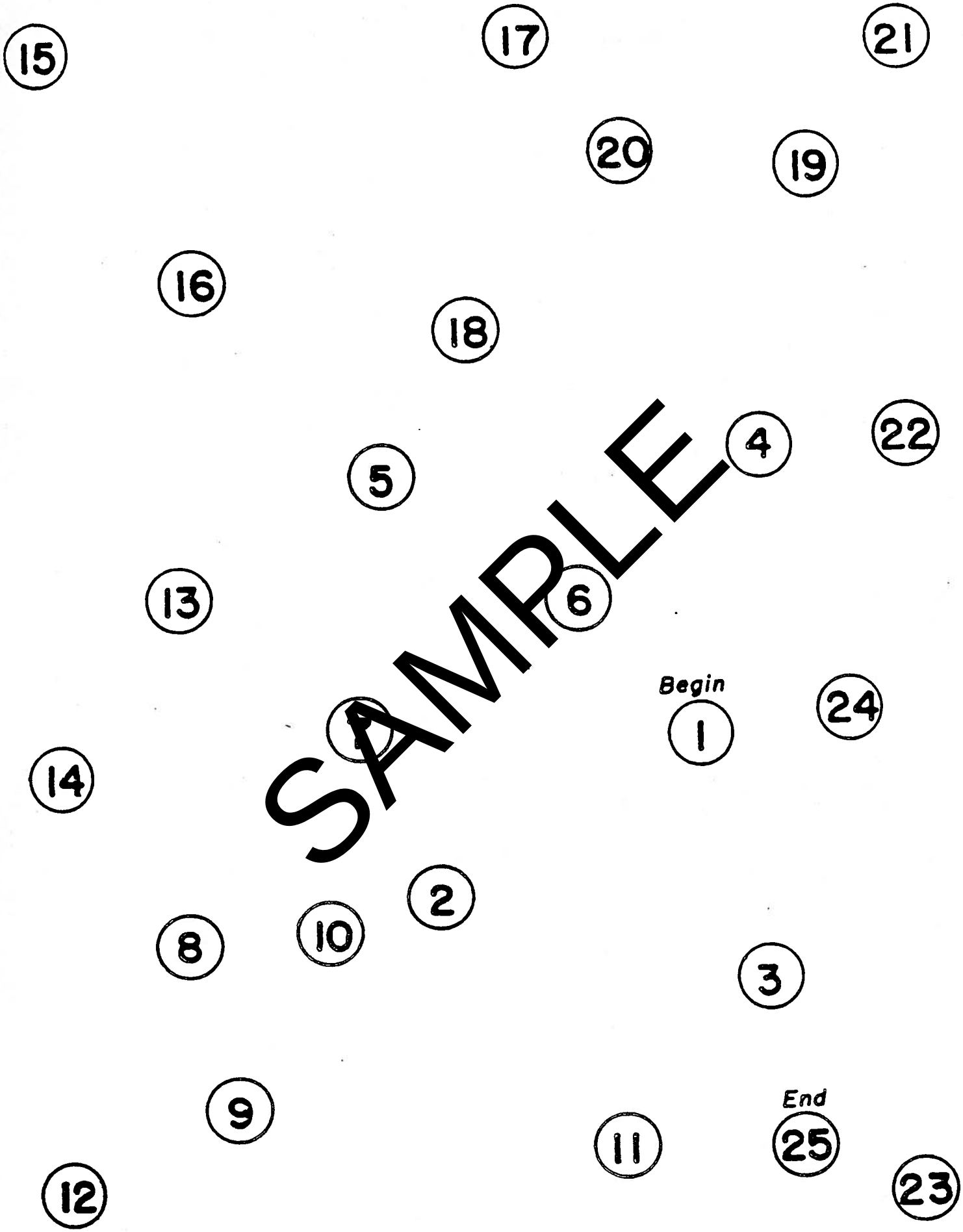


TRAIL MAKING

Part A

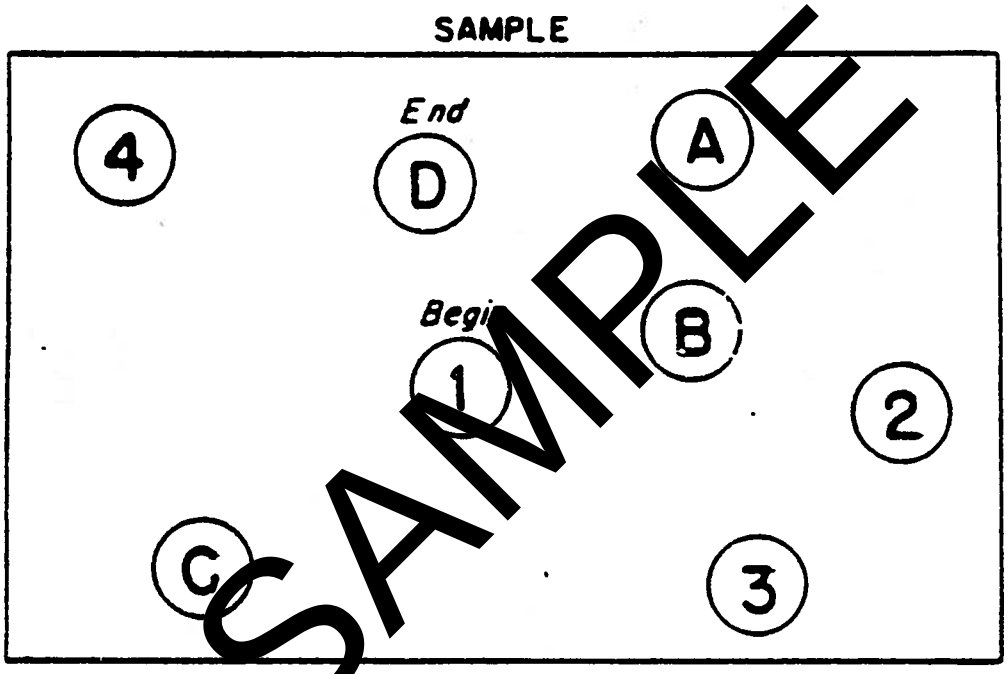
SAMPLE

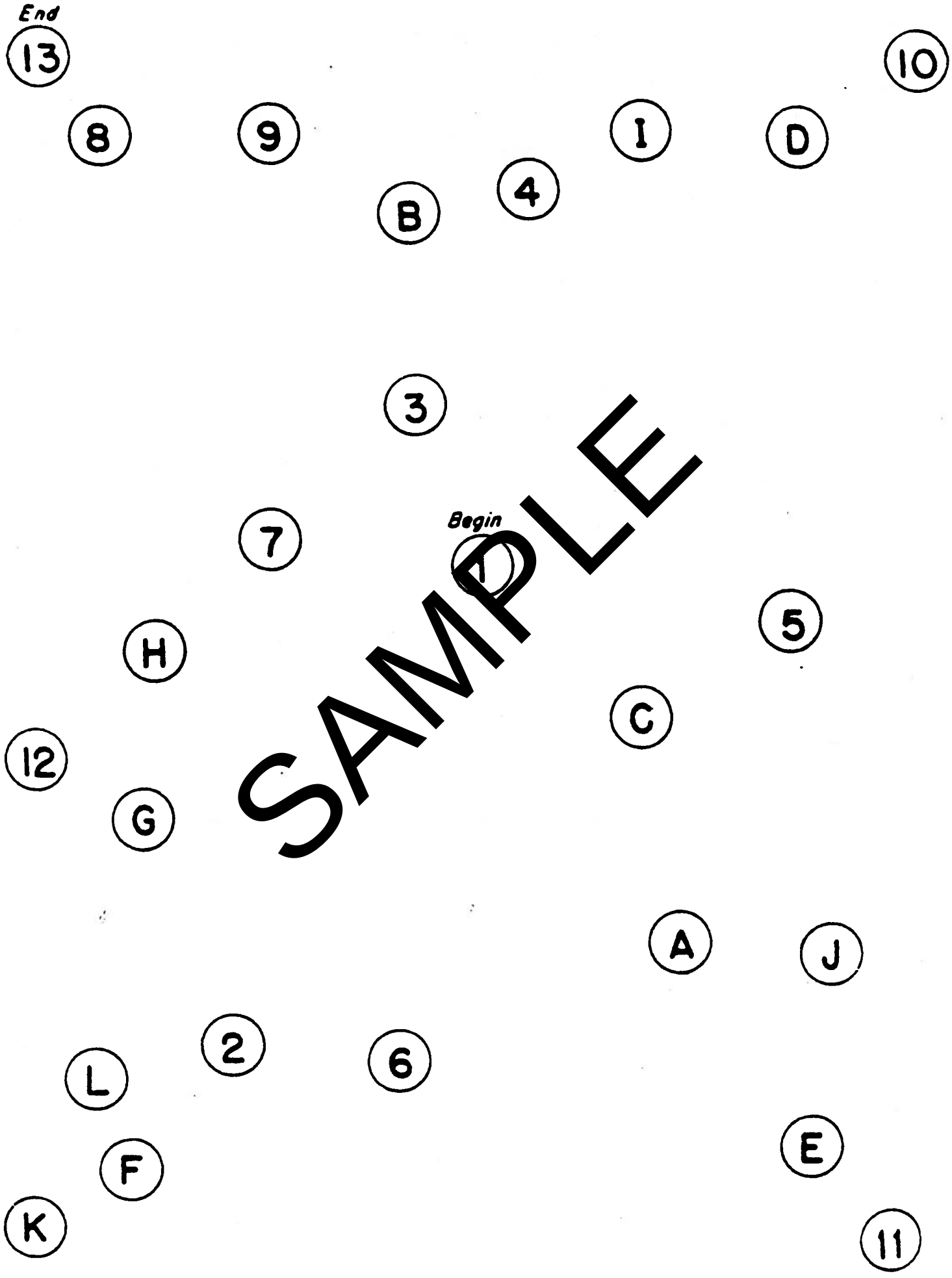



15
17
21
20
19
16
18
22
4
5
13
6
Begin
24
1
14
2
8
10
3
9
End
11
25
12
23
SAMPLE

TRAIL MAKING

Part B




End
13
10
8
9
I
D
4
B
3
SAMPLE
7
Begin
1
5
H
C
12
G
A
J
2
6
L
E
F
K
11

Rey Auditory Verbal Learning Test (RAVLT)

Study ID _____

Learning Trials	Trial I	Trial II	Trial III	Trial IV	Trial V	Interference List	Interference Trial	Trial VI (Imm. Recall)	Delayed Recall (20-30 min)
DRUM						DESK			
CURTAIN						RANGER			
BELL						BIRD			
COFFEE						SHOE			
SCHOOL						STOVE			
PARENT						MOUNTAIN			
MOON						GLASSES			
GARDEN						TOWEL			
HAT						CLOUD			
FARMER						BOAT			
NOSE						LAMB			
TURKEY						GUN			
COLOR						PENCIL			
HOUSE						CHURCH			
RIVER						FISH			
Total Raw Score									

Learning Total Raw Score (add Totals from Trials I-V) :

LA TROBE COMMUNICATION QUESTIONNAIRE

by Jacinta Douglas, Christine Bracy & Pamela Snow

LCQ-Self Form: Frequency

Participant ID #:_____

Date:_____/_____/_____ (circle one) **B1** **Post-Tx** **3mos Post-Tx**

Instructions: The following questions ask you about aspects of your communication. For every question please circle the response which best answers the question, where:

1 = Never or Rarely 2 = Sometimes 3 = Often 4 = Usually or Always

Make sure you consider all the communication situations you meet in your daily life (e.g. family, social and work situations).

WHEN TALKING TO OTHERS DO YOU:	FREQUENCY				
1. Leave out important details?	1	2	3	4	
2. Use a lot of vague or empty words such as "you know what I mean" instead of the right word?	1	2	3	4	
3. Go over and over the same ground in conversation?	1	2	3	4	
4. Switch to a different topic of conversation too quickly?	1	2	3	4	
5. Need a long time to think before answering the other person?	1	2	3	4	
6. Find it hard to look at the other speaker?	1	2	3	4	
7. Have difficulty thinking of the particular word you want?	1	2	3	4	
8. Speak too slowly?	1	2	3	4	
9. Say or do things others might consider rude or embarrassing?	1	2	3	4	
10. Hesitate, pause and/or repeat yourself?	1	2	3	4	
11. Know when to talk and when to listen?	1	2	3	4	
12. Get side-tracked by irrelevant parts of conversations?	1	2	3	4	
13. Find it difficult to follow group conversations?	1	2	3	4	
14. Need the other person to repeat what they have said before being able to answer?	1	2	3	4	
15. Give people information that is not correct?	1	2	3	4	

1 = Never or Rarely	2 = Sometimes	3 = Often	4 = Usually or Always

WHEN TALKING TO OTHERS DO YOU:	FREQUENCY				
16. Make a few false starts before getting your message across?	1	2	3	4	
17. Have trouble using your tone of voice to get the message across?	1	2	3	4	
18. Have difficulty getting conversations started?	1	2	3	4	
19. Keep track of the main details of conversations?	1	2	3	4	
20. Give answers that are not connected to the questions asked?	1	2	3	4	
21. Find it easy to change your speech style (e.g. tone of voice, choice of words) according to the situation you are in?	1	2	3	4	
22. Speak too quickly?	1	2	3	4	
23. Put ideas together in a logical way?	1	2	3	4	
24. Allow people to assume the wrong impressions from your conversations?	1	2	3	4	
25. Carry on talking about things for too long in your conversations?	1	2	3	4	
26. Have difficulty thinking of things to say to keep conversations going?	1	2	3	4	
27. Answer without taking time to think about what the other person has said?	1	2	3	4	
28. Give information that is completely accurate?	1	2	3	4	
29. Lose track of conversations in noisy places?	1	2	3	4	
30. Have difficulty bringing conversations to a close?	1	2	3	4	

LA TROBE COMMUNICATION QUESTIONNAIRE

by Jacinta Douglas, Christine Bracy & Pamela Snow

LCQ-Close Other Form: Frequency

Participant ID #:_____

Date:_____/_____/_____ (circle one) **B1** **Post-Tx** **3mos Post-Tx**

Relationship to patient:_____

Instructions: The following questions ask about aspects of _____ communication. For every question please circle the response which best answers the question, where:

1 = Never or Rarely 2 = Sometimes 3 = Often 4 = Usually or Always

Make sure you consider all the communication situations encountered in daily life (e.g. family, social and work situations).

WHEN TALKING TO OTHERS DOES _____:	FREQUENCY				
1. Leave out important details?	1	2	3	4	
2. Use a lot of vague or empty words such as "you know what I mean" instead of the right word?	1	2	3	4	
3. Go over and over the same ground in conversation?	1	2	3	4	
4. Switch to a different topic of conversation too quickly?	1	2	3	4	
5. Need a long time to think before answering the other person?	1	2	3	4	
6. Find it hard to look at the other speaker?	1	2	3	4	
7. Have difficulty thinking of the particular word he/she wants?	1	2	3	4	
8. Speak too slowly?	1	2	3	4	
9. Say or do things others might consider rude or embarrassing?	1	2	3	4	
10. Hesitate, pause and/or repeat him/herself?	1	2	3	4	
11. Know when to talk and when to listen?	1	2	3	4	
12. Get side-tracked by irrelevant parts of conversations?	1	2	3	4	
13. Find it difficult to follow group conversations?	1	2	3	4	
14. Need the other person to repeat what they have said before being able to answer?	1	2	3	4	
15. Give people information that is not correct?	1	2	3	4	

1 = Never or Rarely	2 = Sometimes	3 = Often	4 = Usually or Always

WHEN TALKING TO OTHERS DOES _____:	FREQUENCY				
16. Make a few false starts before getting his/her message across?	1	2	3	4	
17. Have trouble using his/her tone of voice to get the message across?	1	2	3	4	
18. Have difficulty getting conversations started?	1	2	3	4	
19. Keep track of the main details of conversations?	1	2	3	4	
20. Give answers that are not connected to the questions asked?	1	2	3	4	
21. Find it easy to change his/her speech style (e.g. tone of voice, choice of words) according to the situation he/she is in?	1	2	3	4	
22. Speak too quickly?	1	2	3	4	
23. Put ideas together in a logical way?	1	2	3	4	
24. Allow people to assume the wrong impressions from his/her conversations?	1	2	3	4	
25. Carry on talking about things for too long in his/her conversations?	1	2	3	4	
26. Have difficulty thinking of things to say to keep conversations going?	1	2	3	4	
27. Answer without taking time to think about what the other person has said?	1	2	3	4	
28. Give information that is completely accurate?	1	2	3	4	
29. Lose track of conversations in noisy places?	1	2	3	4	
30. Have difficulty bringing conversations to a close?	1	2	3	4	

BSI® 18

Brief Symptom Inventory 18

Leonard R. Derogatis, PhD

Hand-Scored Answer Sheet

ADMINISTRATOR:

BE SURE THE DEMOGRAPHIC INFORMATION ON PAGE 5 IS COMPLETED.

AFTER THE QUESTIONNAIRE IS COMPLETED, DETACH PAGE 5 BY CAREFULLY TEARING ALONG THE PERFORATED LINE. THEN DISCARD PAGES 1 THROUGH 4 AS YOU WOULD OTHER CONFIDENTIAL DOCUMENTS.

PEARSON

PsychCorp

Product Number 51907

INSTRUCTIONS

The BSI 18 consists of a list of problems people sometimes have. Read each one carefully and circle the number of the response that best describes HOW MUCH THAT PROBLEM HAS DISTRESSED OR BOTHERED YOU DURING THE PAST 7 DAYS INCLUDING TODAY. Circle only one number for each problem (0 1②3 4). Do not skip any items. If you change your mind, draw an X through your original answer and then circle your new answer (0 1⊗3④). Read the example before beginning. If you have any questions, please ask them now.

EXAMPLE

0 = Not at all **1 = A little bit** **2 = Moderately** **3 = Quite a bit** **4 = Extremely**

HOW MUCH WERE YOU DISTRESSED BY:

Body aches ..... 0 1 2 3 ④

PEARSON

P.O. Box 1416 Minneapolis, MN 55440 800.627.7271 www.PearsonAssessments.com

A 0 9 8 7 6 5 4 3

0 = Not at all 1 = A little bit 2 = Moderately 3 = Quite a bit 4 = Extremely

heet

HOW MUCH WERE YOU DISTRESSED BY:

	NOT AT ALL	A LITTLE BIT	MODERATELY	QUITE A BIT	EXTREMELY
1. Faintness or dizziness	0	1	2	3	4
2. Feeling no interest in things	0	1	2	3	4
3. Nervousness or shakiness inside	0	1	2	3	4
4. Pains in heart or chest	0	1	2	3	4
5. Feeling lonely	0	1	2	3	4
6. Feeling tense or keyed up	0	1	2	3	4
7. Nausea or upset stomach	0	1	2	3	4
8. Feeling blue	0	1	2	3	4
9. Suddenly scared for no reason	0	1	2	3	4
10. Trouble getting your breath	0	1	2	3	4
11. Feelings of worthlessness	0	1	2	3	4
12. Spells of terror or panic	0	1	2	3	4
13. Numbness or tingling in parts of your body	0	1	2	3	4
14. Feeling hopeless about the future	0	1	2	3	4
15. Feeling so restless you could not sit still	0	1	2	3	4
16. Feeling weak in parts of your body	0	1	2	3	4
17. Thoughts of ending your life	0	1	2	3	4
18. Feeling fearful	0	1	2	3	4

om
uted

means,
val

f Pearson
.

hCorp

Turn the page and follow the directions to complete the additional information.

er 51907

BSI® 18
Brief Symptom Inventory 18
Leonard R. Derogatis, PhD

Hand-Scored Answer Sheet

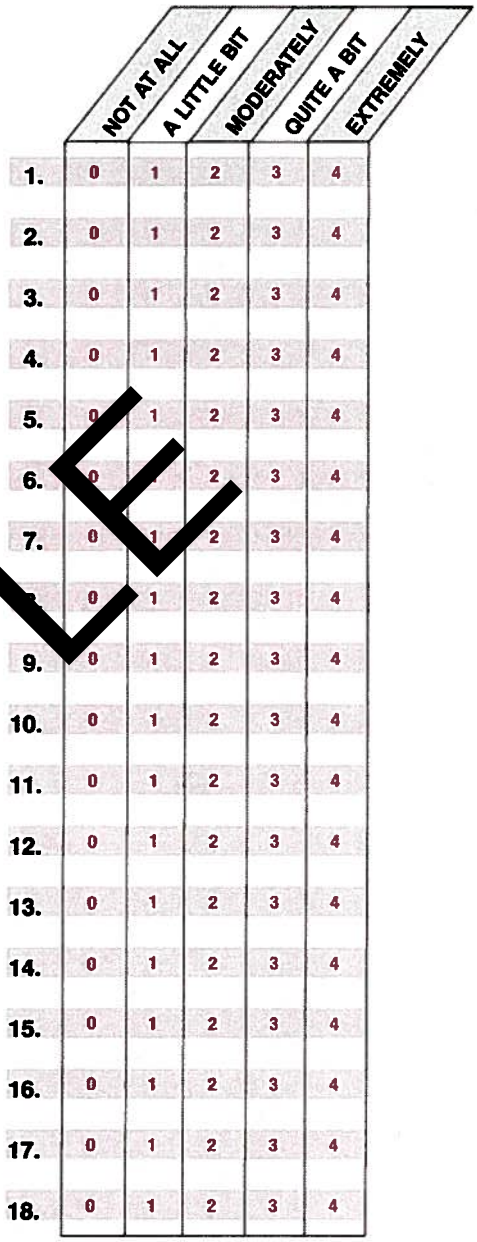
DIRECTIONS

Print your identification number, age, gender, and test date below.

Name

ID Number

Age Gender Test Date



P.O. Box 1416 Minneapolis, MN 55440 800.627.7271 www.PearsonAssessments.com

A 0 9 8 7 6 5 4 3

PEARSON

PsychCorp

Product Number 51907

PTSD Checklist – Civilian Version (PCL-C)

Participant ID#: _____
Date Completed: _____ (circle one) **B1** **Post-Tx** **3mos Post-Tx**

Instruction to patient: Below is a list of problems and complaints that veterans sometimes have in response to stressful life experiences. Please read each one carefully, put an "X" in the box to indicate how much you have been bothered by that problem **in the last month**.

No.	Response:	Not at all (1)	A little bit (2)	Moderately (3)	Quite a bit (4)	Extremely (5)
1.	Repeated, disturbing memories, thoughts, or images of a stressful experience from the past?					
2.	Repeated, disturbing dreams of a stressful experience from the past?					
3.	Suddenly acting or feeling as if a stressful experience were happening again (as if you were reliving it)?					
4.	Feeling very upset when something reminded you of a stressful experience from the past?					
5.	Having physical reactions (e.g., heart pounding, trouble breathing, or sweating) when something reminded you of a stressful experience from the past?					
6.	Avoid thinking about or talking about a stressful experience from the past or avoid having feelings related to it?					
7.	Avoid activities or situations because they remind you of a stressful experience from the past?					
8.	Trouble remembering important parts of a stressful experience from the past?					
9.	Loss of interest in things that you used to enjoy?					
10.	Feeling distant or cut off from other people?					
11.	Feeling emotionally numb or being unable to have loving feelings for those close to you?					
12.	Feeling as if your future will somehow be cut short?					
13.	Trouble falling or staying asleep?					
14.	Feeling irritable or having angry outbursts?					
15.	Having difficulty concentrating?					

16.	Being “super alert” or watchful on guard?					
17.	Feeling jumpy or easily startled?					

Weathers, F.W., Huska, J.A., Keane, T.M. PCL-C for DSM-IV. Boston: National Center for PTSD – Behavioral Science Division, 1991.

SCALE OF PERCEIVED SOCIAL SELF-EFFICACY

Participant ID#: _____
Date Completed: _____ (circle one) **B1** **Post-Tx** **3mos Post-Tx**

Instructions: Please read each statement carefully. Then decide how much confidence you have that you could perform each of these activities successfully. Mark the appropriate number for your level of confidence.

No Confidence At all 1	Little Confidence 2	Moderate Confidence 3	Much Confidence 4	Complete Confidence 5

1. Start a conversation with someone you don't know very well.	1	2	3	4	5
2. Express your opinion to a group of people discussing a subject that is of interest to you.	1	2	3	4	5
3. Work on a school, work, community or other project with people you don't know very well.	1	2	3	4	5
4. Help to make someone you've recently met feel comfortable with your group of friends.	1	2	3	4	5
5. Share with a group of people an interesting experience you once had.	1	2	3	4	5
6. Put yourself in a new and different social situation.	1	2	3	4	5
7. Volunteer to help organize an event.	1	2	3	4	5
8. Ask a group of people who are planning to engage in a social activity (e.g., go to a movie) if you can join them.	1	2	3	4	5
9. Get invited to a party that is being given by a prominent or popular individual.	1	2	3	4	5
10. Volunteer to help lead a group or organization.	1	2	3	4	5
11. Keep your side of the conversation.	1	2	3	4	5
12. Be involved in group activities.	1	2	3	4	5
13. Find someone to spend a weekend afternoon with.	1	2	3	4	5
14. Express your feelings to another person.	1	2	3	4	5
15. Find someone to go to lunch with.	1	2	3	4	5
16. Ask someone out on a date.	1	2	3	4	5
17. Go to a party or social function where you probably won't know anyone.	1	2	3	4	5
18. Ask someone for help when you need it.	1	2	3	4	5
19. Make friends with a member of your peer group.	1	2	3	4	5
20. Join a lunch or dinner table where people are already sitting and talking.	1	2	3	4	5
21. Make friends in a group where everyone else knows each other.	1	2	3	4	5
22. Ask someone out after s/he was busy the first time you asked.	1	2	3	4	5
23. Get a date to a dance that your friends are going to.	1	2	3	4	5
24. Call someone you've met and would like to know better.	1	2	3	4	5
25. Ask a potential friend out for coffee.	1	2	3	4	5

Satisfaction With Life Scale

Participant ID#: _____

Date Completed: _____ (circle one) **B1** **Post-Tx** **3mos Post-Tx**

Below are five statements with which you may agree or disagree. Using the 1-7 scale, indicate your agreement with each item by circling the appropriate response following each item. Please be open and honest in your responding.

1. In most ways my life is close to my ideal.

Strongly disagree (1)	Disagree (2)	Slightly disagree (3)	Neither agree nor disagree (4)	Slightly agree (5)	Agree (6)	Strongly agree (7)

2. The conditions of my life are excellent.

Strongly disagree (1)	Disagree (2)	Slightly disagree (3)	Neither agree nor disagree (4)	Slightly agree (5)	Agree (6)	Strongly agree (7)

3. I am satisfied with my life.

Strongly disagree (1)	Disagree (2)	Slightly disagree (3)	Neither agree nor disagree (4)	Slightly agree (5)	Agree (6)	Strongly agree (7)

4. So far I have gotten the important things I want in life.

Strongly disagree (1)	Disagree (2)	Slightly disagree (3)	Neither agree nor disagree (4)	Slightly agree (5)	Agree (6)	Strongly agree (7)

5. If I could live my life over, I would change almost nothing.

Strongly disagree (1)	Disagree (2)	Slightly disagree (3)	Neither agree nor disagree (4)	Slightly agree (5)	Agree (6)	Strongly agree (7)

Diener E, Emmons R, Larsen J, Griffin S. The satisfaction with life scale. J Pers Assess 1985;49:71-5

Participant Name:

(This portion of form will be removed by the Study Coordinator/Research Asst and replaced with Participant ID below. This will be done prior to any data entry).

Participant ID#: _____ ***(To be completed by STUDY COORDINATOR or RESEARCH ASSITANT)***

Group Cohesion Scale Key

Date Completed: _____ (circle one) **Week 4** **Post-Tx**

The following items are about your perception of your group's development at this time. Rate each item on the four point scale provided below. Remember, there are no right or wrong answers. We are interested in your perception of the group's functioning.

These items are to be rated on a 1 to 4 point scale

1 = Strongly Disagree
2 =Disagree
3 =Agree
4 = Strongly Agree
* = Items that are reversed

---

1. Group members are accepting of variations in each other's culture, customs, habits, and traditions.	1	2	3	4
2. There are positive relationships among the group members.	1	2	3	4
3. There is a feeling of unity and togetherness among group members.	1	2	3	4
4. Group members usually feel free to share information.	1	2	3	4
*5. Problem solving processes are disrupted if one or two members are absent.	1	2	3	4
6. The group members feel comfortable in expressing disagreements in the group.	1	2	3	4
7. Problem solving in this group is truly a group effort.	1	2	3	4
8. Group members influence one another.	1	2	3	4
*9. I dislike going to group meetings.	1	2	3	4
10. The group members seem to be aware of the group's unspoken rules.	1	2	3	4

*11. Discussions appear to be unrelated to the concerns of the group members.	1	2	3	4
12. Most group members contribute to decision making in this group.	1	2	3	4
13. Group members are receptive to feedback and criticism.	1	2	3	4
14. Despite group tensions, members tend to stick together.	1	2	3	4
*15. It appears that the individual and group goals are inconsistent.	1	2	3	4
*16. An unhealthy competitive attitude appears to be present among group members.	1	2	3	4
17. Group members usually feel free to share their opinions.	1	2	3	4
*18. Some members are quiet, and minimal attempts are made to include them.	1	2	3	4
19. Group members respect the agreement of confidentiality.	1	2	3	4
20. People are concerned when a group member is absent.	1	2	3	4
21. Group members would <u>not</u> like to postpone group meetings.	1	2	3	4
*22. Many members engage in "back-biting" in this group.	1	2	3	4
23. Group members usually feel free to share their feelings.	1	2	3	4
*24. If a group with the same goals were formed, I would prefer to be a member of that group.	1	2	3	4
*25. I feel vulnerable in this group.	1	2	3	4

Participant Name:

(This portion of form will be removed by the Study Coordinator/Research Asst prior to upload to database).

Participant ID#: _____ ***(To be completed by STUDY COORDINATOR or RESEARCH ASSITANT)***

TBI Social Competence Collaborative DoD Study

Goal Scaling Form (GAS)

Study Site: _____

Date: _____ (circle one) **Week 4** **Post-Tx** **3 Month Post-Tx**

GOAL A:

1.
2.
3.
4.
5.

Date	(Week 4)	(Post-Tx)	(3 Mo. Post-Tx)
self			
other			

GOAL B:

1.
2.
3.
4.
5.

Date	(Week 4)	(Post-Tx)	(3 Mo. Post-Tx)
self			
other			

GOAL C:

1.
2.
3.
4.
5.

Date	(Week 4)	(Post-Tx)	(3 Mo. Post-Tx)
self			
other			

SOCIAL COMPETENCE TRAINING

STUDY COORDINATORS

DAY 1

Wednesday June 27, 2012

8:00am – 5:00pm

8:00 Breakfast

8:30am – 9:45am Study Overview - ALL ATTENDEES

- Introductions *(20 min)*
- Overview of Study *(30 min)*
- Communication Strategies
- Background/Overview of GIST intervention *(10 min)*
- Review Training Schedule and Objectives *(10 min)*

9:45am – 10:00 Break

10:00am – 12:00pm Recruitment, Screening, & Enrollment (Clare)

- Recruitment
- Screening
- Enrollment & Informed Consent Process
- Randomization

12:00pm- 1:00pm LUNCH

1:00pm – 3:00pm Videotaped Conversations

- Using the Video Camera
- Conversational Partners
    - Training Conversational Partners (show videotape)
    - Randomizing Conversational Partners
- Completing the Videotaped Conversation
- Sending Video data to Craig

3:00pm – 3:15 BREAK

3:15pm – 5:00pm Study Intervention

- Planning for Intervention
    - Location
    - Equipment
    - Participants
    - Fidelity
        - Using audio recorders
        - Sending audio files to Craig
- Ongoing Duties of Group Therapists during Intervention

SOCIAL COMPETENCE TRAINING

STUDY COORDINATORS

DAY 2

Thursday June 28, 2012

9:00am – 4:00pm

8:30 Breakfast

9:00am – 11:30am Assessment/Data Collection

- Baseline Assessment – neuropsych/MSVT
- Week 4 Assessments
- Post Treatment Assessment
- 3 Month Follow-Up Assessment

11:30am – 12:30pm LUNCH

12:30pm – 2:30pm Website & Data Entry

2:30pm – 2:45pm Break

2:45pm - 4:00pm Review/Questions/Discussion

Group Interactive Structured Treatment – GIST for Social Competence

Therapist Training

Day 1

8:30 – Welcome and Sharing of Group Therapists Clinical Backgrounds

9:00 - The GIST MODEL for Social Competence

10:00 – Break

10:15 - Implementing and facilitating the group

10:45 - Session by Session Overview - GIST Model: sessions 1–5, small group exercises

12:00 – Lunch

1:00 – Session by Session Overview: Sessions 6 – 13, with small group exercises

3:00 – Break

3:15 - Case studies – Video and Discussion

4:00 - Questions and Discussion

4:20 - Group Therapist Homework for Day 3: Preparing to Work as Co-Therapists

4:30 - Adjourn

Day 2 – CLINICAL INTERVENTION TRAINING CONTINUED -Group Therapists

8:30 – 4:30 p.m.

(*Video, group problem solving, group discussion)*

8:30 – Working as a Co-Group Therapist

9:30 - The Role of Families/Friends

10:00 – Break

10:15 – Social Problem Solving

11:00 – Group Process Techniques

11:30 - Lunch as a group

1:00 - Facilitating the GIST Group: Practicing as Co-group Therapists

3:00 – Break

3:15 - Handling Difficult or Unique Situations

3:45 – Developing Individual Recommendations

4:00 - Questions, Discussion

4:30 – Adjourn and Hand out Training Evaluation